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COLONIAL TRADE.

The Colonial Issue of "The Chemist and Druggist"

Falls this year on Saturday, April 19.

It will go to the best buyers of druggists' goods

In the Britalns beyond the sea.

Besides, it will be specially circulated in Japan:

Japanese trade is worth looking after.

The Anglo-Japanese alliance will influence trade.

The C. & D. is in touch with buyers in Japan.

We have correspondents there who look after our interests.

Business men should make the most of the alliance.

So far as chemicals, drugs and sundries are concerned

The C. & D. of April 19 will be the medium for business.

Summary.

A BUDGET of settlements of Irish drug contracts is printed on p. 518.

SOME pharmaceutical news from the "Potteries" will be found on p. 516.

THE appeal in the "XL-All" insecticide case has been abandoned (p. 535).

MR. LEO ATKINSON replies to "Xrayser's" criticism of his views on the Stamp Acts (p. 538).

THE BRADFORD VIEWS on dispensing by doctors and prescribing by druggists will be found on p. 523.

AN ORDINARY RETAILER gives some further advice to wholesale houses as to monthly accounts (p. 538).

A FURTHER large number of drug and similar contracts which have been settled are notified on p. 517.

MR. EDWARD BAKER, of Chichester, whose death we reported last week, was a Crimean veteran (p. 559).

WE learn by cable that the Cape Pharmaceutical Society is to support the Martindale memorial (p. 521).

THE PUBLIC DISPENSERS' ASSOCIATION has dropped "Poor-law" out of its title, and is otherwise advancing (p. 523).

NEWCASTLE-ON-TYNE chemists have agreed to do something to further State-aid for pharmaceutical education (p. 527).

THE SOCIETY of Chemical Industry is moving to secure the use of duty-free alcohol for manufacturing purposes (p. 535).

MR. G. F. WILSON, F.R.S., the inventor of the process through which Price's glycerin was introduced, died last week (p. 523).

THE PRESENT CONDITION of the dental and medical professions as indicated by the official Registers is the subject of an article on p. 533.

USEFUL HINTS ON DOSAGE, by DR. J. Gordon Sharp, are epitomised on p. 526. They are especially addressed to young druggists.

SOMERSET HOUSE is appealing against the Brentford Magistrates' decision in the "delightfully soothing" label case (p. 535 and p. 536).

TWO SONS of Mr. J. T. Holmes, one of the founders of the Pharmaceutical Society of Ireland, were drowned at New Brighton last week (p. 518).

EDINBURGH CHEMISTS have discussed the chemist's duties in regard to the sale of poisons, and their views are worthy of consideration (p. 525).

TORQUAY CHEMISTS want the Pharmaceutical Council to pay more attention to Stamp Act questions and to defend chemists "dropped on" (p. 524).

CARDIFF CHEMISTS do not believe in a compulsory curriculum and they are divided in opinion as to "Bankum & Co."—their President's title for proprietaries (p. 524).

THE FRENCH SENATE has agreed to a measure restricting the use of saccharin to therapeutic purposes and its sale to pharmacists. The debate is fully reported on p. 520.

JAMAICA HONEY sells at so low prices that the bee-keepers of the island have sent a representative to England in order to try to make better terms. We discuss the matter on p. 532.

THE HOLIDAYS are reflected in the markets this week, business being tame. Cod-liver oil is dearer again, crude Japanese camphor is lower, cream of tartar is firmer, and shellac is higher (p. 544).

CHRISTMAS ISLAND PHOSPHATE SHARES of the value of 25,000/- have been bequeathed by the late Mr. Robert Irvine, F.C.S., to found a chair of bacteriology in Edinburgh University (p. 519 and p. 530).

CHEMISTS' ASSISTANTS are as scarce on the Continent as in Great Britain, and the demand for female assistants is increasing. See the article on women in pharmacy (p. 531), and the *apropos* sketch and rhyme on p. 530.

MR. MARSHAM, the Bow Street Magistrate, has decided that methylated soap liniment is a domestic remedy and an article of commerce, the sale of which is not an infringement of the Sale of Food and Drugs Act (p. 536).

PROFESSOR VAN'T HOFF, of Berlin, was entertained to dinner by the Council of the Chemical Society last week on the occasion of his delivering the Raoult Memorial lecture. These functions, and the anniversary meeting of the Society, are reported on p. 547, portraits of Professors Reynolds, van't Hoff, and Raoult being included.

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

Mr. Thomas Miller, chemist and druggist, has been elected to the Wednesfield School Board.

An elderly man, on April 2, died suddenly from heart-failure in a chemist's shop at Weston-super-Mare.

Mr. John Calge, chemist and druggist, Diss., has been elected a member of the Diss Board of Guardians.

Mr. Pooley, public analyst for Essex, has undertaken to analyse samples under the Sale of Food and Drugs Act for Urban District Councils at a reduced fee of 10s 6d. for each sample.

A man named Arthur Harrison, described as an apothecary, has been sentenced to eighteen months' hard labour at the Chichester Sessions for obtaining goods and money by false pretences.

The Board of Trade Advisory Committee on Commercial Intelligence met at the offices, Whitehall Gardens, S.W., last week, Professor Wyndham Dunstan, F.R.S., being amongst those present.

The addition of 10 per cent. of maize flour to wheaten flour (sold as "Eifel Tower Self-raising Flour") was considered by the Wolverhampton Magistrates last week to be an offence under the S. F. and D. Acts.

At Marlborough Street Police Court on March 31 Kenneth McDonald (35), described as a chemist (but who is not the "Kenneth McDonald" on the Register of Chemists and Druggists), was remanded on a charge of committing a breach of the peace in Hyde Park.

At the March meeting of the Manchester Dramatic Lodge of Freemasons, held at the Masonic Hall, No. 2,387, Bro. Charles Swinn, P.M., P.P.G.D., pharmaceutical chemist, St. Mary's Pharmacy, Hulme, was unanimously re-elected Treasurer of the Lodge, of which he was one of the founders.

The office staff of Messrs. Calbury Brothers (Limited), Bournville, Birmingham, numbering about 120, recently moved into new offices, and the thoughtfulness of the firm for the comfort and convenience of their employés is shown by the provision of a smoke-room to which the employés can repair for a social smoke and chat after dinner.

Fire.

The premises of Messrs. Barnett & Fosier (Limited), mineral-water engineers, at Eagle Wharf Road, New North Road, N., were the scene of a serious outbreak of fire on March 29. The flames originated in a workshop at the back of the main building, and soon obtained a good hold. In the course of an hour the fire was overcome, although not before a good deal of damage had been done.

Alterations and Improvements.

The premises of Messrs. Anderson & Virgo, The Foregate, Worcester, are being demolished to effect an important street improvement.

Messrs. Horniblow & Son, The Cathedral Pharmacy, Sidbury Worcester, have had their shop refitted by Messrs. Maw, Son & Sons, Aldersgate Street, London.

The Kettering Urban Council has purchased the premises of Mr. J. F. Thursfield, chemist, in order to effect an improvement by widening Sheep Street.

Liverpool University.

The proposal for making Liverpool University College into a degree-granting body distinct from Victoria University has reached the practical or money-giving stage. A third of a million is wanted for it, and towards this sum we notice that Sir John Brunner, Bart., has given 25,000*l.*, Mr. William Gossage 5,000*l.*, Mr. E. K. Muspratt 1,000*l.*, and Messrs.

Evans, Sons & Co. 1,000*l.* The Liverpool Chemists' Association is giving 100*l.* The Leeds City Council are agreed that the dissolution of the Victoria University would be detrimental to the interests of university education in the north of England, and have instructed the Finance Committee, if thought desirable, to represent the views of the Corporation to the King in Council.

Birmingham Notes.

In a window of a suburban chemist's shop there is displayed a large poster showing Sandow in various athletic attitudes. This calls forcible attention to the Sandow embrocation.

Medical men, it is interesting to note, are now advertising for married dispensers. Can this mean a beginning of the elimination of the lady dispenser, or are all of this class taking to double harness?

The City Council last week sanctioned, on the Health Committee's recommendation, the appointment of Mr. G. F. Liverseege as public analyst for Birmingham, at a salary of 350*l.*, which is an advance on his previous salary of 30*l.* per annum. After much discussion, Dr. Alfred Hill was appointed M.O.H., at a salary of 1,000*l.* a year.

"A Manifest Piece of Patchwork"

Swift's words quoted by a Correspondent in the Potteries district.

Bank Holiday was generally observed by the chemists throughout the Potteries, and even in Newcastle, where a very large annual fair is held on Easter Monday, the rule was not broken.

In the last-named town the chemists, who do a large trade in veterinary medicines, advertise very largely by posters in the repositories and other conspicuous assemblies of cattle and horses, notably Messrs. Turner, Wain, &c.

In the Market Square at the fair was seen an object-lesson in the art of making "cough troch," which certainly amused the crowd, sold the article rapidly, and interested one pharmacist at least. With a saucepan, coke fire in a tripod cauldron, some sugar, and peppermint oil, a dapper little chap produced a 3 lb. batch of medicated rock, poured it out on a marble slab, and while in that condition "pulled" it over a large silver-plated hook such as the plaster-maker adopts, and transformed in five minutes a clear pale-yellowish mass into an opaque pearl-white which, with much "patter," he proceeded to cut up into penn'orths, and distributed with great rapidity amongst the crowd.

The promiscuous recommendation of the use of chemicals for domestic purposes is always attended with danger. On the advice of a friend employed at the gasworks, a Longton publican, Miss Sarah Ann Griffiths, manageress of the White Lion Hotel, Church Street, on Good Friday, was cleaning a copper urn with certain acids; some time afterwards the lady complained of the fumes having got on her stomach, causing pain. Acute inflammation arose, and death ensued on Sunday.

It is not often that the tram-ticket is impressed by the name and wares pertaining to pharmacy, but most of them in one district are used as advertisement media by a photographic chemist and druggist—viz., Mr. Turrell, of Hanley.

Mr. Cornwell has established a small branch chemist's shop in Hope Street, Hanley, and Mr. Young has invaded Wolstanton, a large and much-built suburb of Burslem—the mother of the Potteries.

The large residence formerly owned by the late Mr. Thomas Leicester, chemist, of cough lozenge fame, situated in Waterloo Road, Burslem, has been converted into a clubhouse, and the grounds into a bowling-green.

The trade generally in the district is not good, and the pharmacist has much to complain of, but the fillip given to the trade by the Imperial order for half-a-million Coronation mugs has brightened the hopes of our much-worked and little-renumerated brethren of Pottersborough.

The ladies of this district are mostly engaged in the "pots," and having much time at their disposal week-ends, indulge in finery and perfumery. One well-known pharmacist—Mr. Edmund Jones—sells an enormous amount amongst

them, and from an all-round conversation the industry in soaps and other toilet-requisites is "prodeegiou."

An excellent advertisement of the mechanical sort can be seen in a chemist's shop-window in the Squire, Tunstall. It consists of a figure, the head part of which is screened by a fan. The fan moves and shows a headless man, and by his side is a black box containing the capital appendage. The second movement shows the fan replaced, to be again removed, showing head in position and the box empty. All this is followed by clapping in the gallery and nods of approval in the stalls where the audience is seen to be assembled.

A Midland Exhibition.

The art and industrial exhibition to be held at Wolverhampton this year is to be opened on May Day by the Duke and Duchess of Connaught. The main buildings, which have been designed by the architects who planned the Glasgow structures, are being erected in the West End Park, and will occupy 127,215 square feet. They comprise an Industrial Hall, a Machinery Hall, and a Canadian Pavilion, and in their design precedent has practically been ignored, and an endeavour made to reflect artistically their contents and use. There will also be other buildings, such as restaurants, a concert-hall, &c., covering an additional area of 20,981 square feet. About thirty-two acres of ground have been enclosed for the purposes of the Exhibition, and the total capital expenditure will be over 100,000/. All the usual devices for the entertainment of visitors (including a Ping-Pong Tournament) will be provided.

Contracts.

The Gravesend Town Council has appointed Mr. A. Gillett chemist to the Corporation.

Mr. J. Hepworth, chemist and druggist, Loughborough, has been appointed chemist to the workhouse.

The Pontypridd Board of Guardians has accepted the tender of Mr. Oliver W. Davies, chemist, for the supply of drugs.

The Bedford Board of Guardians has appointed Messrs. Taylor & Brawn, of Bedford, to supply drugs to the workhouse.

The Coventry Board of Guardians has appointed Mr. H. Welton, of Bishop Street, Coventry, to be chemist to the workhouse.

Mr. W. T. Horniblow, chemist and druggist, Sidbury, and Mr. Milne, of Tything, have been appointed chemists to the Worcester Workhouse.

Mr. T. J. Calcutt, chemist, Peterborough, has received the contract of the local Board of Guardians for the supply of drugs to the workhouse.

The Dover Board of Guardians has appointed Mr. A. L. Thompson, chemist and druggist, Dover, to supply chemicals to the workhouse.

The tender of the United Alkali Company (Limited) for the supply of manganate of soda has been accepted by the Dartford Rural District Council.

Mr. C. W. Southern, chemist and druggist, Belper, has been selected by the Belper Board of Guardians to supply chemists' requisites to the workhouse.

The Ludlow Board of Guardians has contracted with Mr. Burnett, chemist and druggist, of Ludlow, to supply cod-liver oil and quinine to the workhouse.

Messrs. John Ismay & Sons, wholesale druggists, Groat Market, Newcastle-on-Tyne, will supply the drugs to Newcastle Workhouse during the next half-year.

The Hollingbourne Board of Guardians has accepted the tender of Messrs. Stonham & Sons, chemists and druggists, Maidstone, for the supply of drugs to the workhouse.

The Bolton Board of Guardians has accepted the tender of Messrs. Thos. Moscrop & Co. (Limited), druggists, 1 and 3 Folds Road, Bolton, for the supply of sulphur to the workhouse.

Mr. J. Paul Inch, 1 High Street, Barnstaple, has secured the contract for the supply of Irish moss to H.M.S. Prison,

Dartmoor, and for the supply of cod-liver oil to Barnstaple Union.

Messrs. John Richardson & Co., Leicester (Limited), will supply drugs to the Wolverhampton Workhouse Infirmary for the next half-year at 45/- 9s. 10d., and to the Union Dispensary for the same period at 51/- 14s.

The East Preston (Sussex) Board of Guardians has accepted the tender of Mr. Geo. Light, chemist and druggist, of Arundel, for the supply to the workhouse of Howard's quinine at 1s. 7d. per oz., and cod-liver oil at 4s. 9d. per gal.

The Romney Marsh Board of Guardians has accepted the tender of Mr. C. E. Gerring, chemist and druggist, New Romney, for the supply of Condyl's Fluid and carbolic acid to the workhouse. Mr. Gerring will also supply disinfectants to New Romney Town Council.

The Kettering Urban Council has accepted the tender of Messrs. W. Hitchman & Son, chemists, of Kettering, for pink carbolic powder, 15 per cent., in casks, 4/- 16s. per ton; sanitary fluid, 1s. per gal.; sulphur candles, 7s. per doz.; Pickle's gummed strips, 3s. 10d. per doz. packets; formalin-tablets, 9s. per lb.

At the meeting of the Medway Board of Guardians on March 23, Mr. T. C. Lamb, chemist and druggist, Chatham, one of the guardians, referring to certain remarks that were made at a previous meeting respecting the drug-contracts, said they were unfair to himself. Ever since he had sat on the Board he had gone through the drug-tenders and had endeavoured always to act above-board and fair, but now he found a guardian complaining of the way in which tenders for drugs had been dealt with. Mr. Godsiff inquired whether the tender accepted (that of Messrs. Ostler & Co.) was satisfactory to the doctor, whereupon Mr. Lamb said the suggestion seemed to be that he was interested in the contract. Mr. Godsiff replied that he never said so, and after further altercation Mr. Lamb said the doctor was quite satisfied with the drugs, which were similar to those supplied to St. Bartholomew's Hospital. Mr. Godsiff remarked that he did not say that Mr. Lamb was "in co." with Messrs. Ostler's firm, but he objected to Mr. Lamb going through the drug-tenders alone, and considered that the doctor should decide which tender should be accepted. Several members were of opinion that Mr. Godsiff should withdraw his strictures, but the matter dropped.

Imperialists Enjoy Themselves.

The Bohemian concert at the Albion Hotel on March 23, in connection with the Imperial College of Chemistry, Imperial Buildings, Ludgate Circus, London (Mr. Frederick Davis's), was a very successful affair, a *recherché* programme of a most artistic character being provided. Mr. John Lloyd was an ideal Chairman, and he was supported by Major Graham in the vice-chair. Many ladies were present, and the company numbered about 120. The most noteworthy items on the programme were the rendering of "Wolsey's Speech to Cromwell," by Mr. John Todd; "Fra Giacomo," by Mr. Arthur Foxon; the beautiful violin solos of Mr. Oswald Laston; and the contributions of Mr. Frederick Davis. In the interval Mr. John Todd proposed a vote of thanks to the Chairman and the Vice-Chairman, both of whom subsequently replied. In the course of another speech, Mr. Todd spoke in warmly eulogistic terms of Mr. Frederick Davis's qualities as a tutor and a man. His remarks were endorsed by Mr. Edgar S. Eaton and by the Chairman, and were enthusiastically received. Mr. Edgar S. Eaton and Mr. Roberts-Williams were the accompanists, and the Imperial College Anthem, contributed by the Imperial Quartette as the last item upon the programme, created much laughter. Much of the success of the evening was due to Miss K. Horniblow and Mr. Edgar S. Eaton, who acted as organisers and secretaries throughout.

Poisonings.

Fourteen fatalities from poisoning are recorded since our last report. In eleven cases scheduled poisons were employed, these being carbolic acid (4), hydrocyanic acid (3), laudanum (2), chlorodyne, and oxalic acid. The unscheduled poisons include nitric acid, said to have been taken by a Leeds machinist in mistake for whisky; salts of lemon, taken in a 2-cz. dose by a woman at Abergavenny; and "a

root resembling a yellow radish" which a boy at Putney ate, and which a doctor at the inquest said was "black or garden nightshade." The oxalic acid was taken by a Merthyr carter, who obtained it from Mr. H. M. L'oyd, chemist, Victoria Street, Merthyr, for the purpose of cleaning harness. Carbolic acid still retains favour as a suicidal medium, and at an inquest held at Liverpool on March 29 on the body of a carbolic suicide the Coroner (Mr. T. E. Sampson) said the sale of the poison had been quite in accordance with the law as recently revised, but he still thought the sale of carbolic acid should be put on a more restrictive basis. At an inquest held at Gravesend on the body of Mr. M. C. Carruthers, of Messrs. Carruthers & Co., chemists, Gravesend, the medical evidence showed that death was due to prussic-acid poisoning. Mr. W. Geddes, deceased's partner, said Mr. Carruthers had been suffering from influenza and diarrhoea, and had been very despondent of late.—On March 28 an inquest was held at Norwich on the body of Mr. Arthur William Forster, late secretary and manager to Messrs. Fisher & Co. (Limited), wholesale druggists, Calvert Street, Norwich, who was found dead. From the evidence of Mr. Robert Fisher, managing director of Fisher & Co. (Limited) and father-in-law of deceased, it appeared Forster had been depressed and strange in his manner for some time before his death. Witness had reason to complain of some irregularities in money matters, and deceased had been discharged from the service of the company. Dr. C. J. Mariel said death was due to prussic-acid poisoning.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Sleeping draught Fatality.

An inquest was held at Lisburn (co. Antrim) on March 29 on the body of the Rev. Alfred Ralton, Vicar of Brinsop, Herefordshire, who was found dead in bed at the Pakenham Arms Hotel, Lisburn, on the previous day. Chlorodyne and laudanum bottles were found in the room, and evidence was given that deceased occasionally took sleeping-draughts. Death from an overdose of sleeping-draught was the verdict.

Boating Fatality.

On Good Friday the sons of Mr. J. T. Holmes, one of the founders of the Pharmaceutical Society of Ireland, went out for a sail from Hoylake to Liverpool, along with Mr. John Lewis, of Birkenhead, dentist. Their boat was a 16-foot centreboard one, and when about a mile off New Brighton a sudden squall capsized the boat, and all three were drowned. Mr. Thomas Holmes, the elder of the two brothers, was a powerful swimmer, and it is supposed that he was drowned while trying to save his younger brother, Albert Edward Holmes, a clerk in the Local Government Board at Dublin. The latter had been on a visit to his brother Thomas at Birkenhead. Nothing could be done to avert the calamity or to save the men, and up to the present the bodies of the Holmes brothers have not been recovered. Much sympathy is felt in Dublin for their father, who has had many sorrows to contend with during his career.

Medicine-contracts.

At the meeting of the Strabane Board of Guardians, Mr. Jas. Hill, Stratford, was declared contractor for medicines; and the Medical Requisite Company, Cork, for medical appliances.—Mr. J. J. Cole, chemist, Cavan, was declared contractor for medicines to the Cavan Union.

Mr. P. N. White, Sligo, informs us that he neither tendered nor obtained the contract for medical appliances to the Strokestown Union, as stated in the *C. & D.* last week (page 488). It was the Medical Supply Company, Sligo, that got the contract, and our correspondent sends us a lengthy statement as to this company as well as the circumstances of the case.

The following have been declared contractors for medicines, &c., to the undenominated Boards of Guardians: Macroom (co. Cork) Union and Dispensaries—Messrs. Harrington & Co., Cork, at 13 per cent. below the L.G.B. list. Dunmonway (co. Cork)—Messrs. Harrington & Co., Cork, at 12½ per cent. off, for medicines; and Messrs. Clarke & Co., Dublin, 10 per cent. off, for appliances. Gort (co. Galway)—Messrs. Fannin & Co., Dublin, at 22½ per cent. off, for appliances; Messrs. P. A. Leslie & Co., Dublin, at 12½ per cent. off, for medicines. Dungarvan (co. Waterford)—Messrs. Thacker & Hoffe, Dublin, at 10 per cent. off, for medicines; and the Medical Requisite Company, at 7½ per cent. off, for appliances. Birr (King's County)—Messrs. Golden & Co., Birr, at 5 per cent. off, for medicines; and the Medical Supply Association, at 17½ per cent. off, for appliances. Athlone (co. Westmeath)—The Apothecaries' Hall, Dublin, for medicines; and the Medical Supply Company, Sligo, for appliances. Shillelagh (co. Wicklow)—Messrs. Thacker & Hoffe, Dublin, at 10 per cent. off, for medicines; and Messrs. Smith & Sheppard, Dublin, at 7½ per cent. off, for appliances. Castlerea (co. Longford)—Messrs. Boyes & Co., Dublin, at 15½ per cent. off, for medicines; and Mr. Adamson, Ballina, at 20 per cent. off, for appliances. Omagh (co. Tyrone)—Messrs. P. A. Leslie & Co., Dublin, at 27½ per cent. off, for medicines; and the Medical Supply Association, Dublin, at 15 per cent. off, for appliances. Carlow—Mr. D. J. McGrath, Carlow, at 22½ per cent. off, for medicines (Messrs. Hoyte & Co., Dublin, tendered at 2½ per cent. off, and Messrs. Leslie & Co., at 2 per cent. off); and the Medical Supply Association, at 20 per cent. off, for appliances. Wexford—Messrs. Fannin & Co., Dublin, for medicines. Gorey (co. Wexford)—Messrs. Thacker & Hoffe, Dublin, at 10½ per cent. off, for medicines (Messrs. Leslie & Co., at 5 per cent. off); and Messrs. Fannin & Co., Dublin, at 12½ per cent. off, for appliances.

English and Irish Medicines.

At the last meeting of the Dungarvan (co. Waterford) Board of Guardians, the following letter was read from Messrs. W. A. Leslie & Co., Dublin, regarding the medicine-contract:

GENTLEMEN,—Our attention has been called to a resolution passed by your Board to try and obtain medicines from London. Of course, you are at perfect liberty to do this; but, at the same time, we think it is scarcely a patriotic action, and certainly it is the first time to our knowledge that such a thing has been done by any Board of Guardians. Certainly in the old days of the *ex-officio* Guardians these gentlemen, although they did not proclaim to the world what fine patriots they were, yet they never endeavoured to obtain supplies from England, and this, in a practical fashion, showed their patriotism. We note that you are astonished at the rise of 12½ per cent. in the price of goods. This is simply accounted for by the fact that the price of the crude materials is increased, and when we tender we reckon on the price ruling on the day we put in our tender . . . Certainly there is no such thing as a "ring" among the wholesale druggists in Ireland. Thanking you, gentlemen, for your past kindness to us—a house established in the year 1683 and a house that employs, and has always employed, a large number of hands (every one an Irishman), and which manufactures all the chemicals and drugs dealt in—and regretting that you should now endeavour to secure your supplies from England, we are, your obedient servants,

W. A. LESLIE & CO.

The Guardians discussed the letter, and came to the conclusion that it was "uncalled-for, if not insulting."

Personal.

Mr. George W. A. Howard, Belfast, who is one of Mr. S. Gibson's staff, was last week presented with an illuminated address and gold watch by the parishioners of St. Mary's Church, Crumlin Road, on his leaving to take up the post of organist at St. Columba's Church, Knock. Mr. Howard has frequently assisted in the musical evenings of the Chemists' and Druggists' Society.

Chemist and Analyst.

At the last meeting of the Wexford Guardians a letter was read from Messrs. John Clarke & Co., Dublin, with reference to one from Professor Tichborne, in which they say:—

We only questioned the figures, and wanted to verify them by an independent analysis ourselves. We never meant to convey

for an instant that Professor Tichborne had made a mistake. We only expressed our surprise at such a stupid mistake having occurred on our part, and we suppose we are like other people, we do not like to admit a mistake until we are certain there is no loophole to get out of. We have not finished our own analysis, but when we do, if our own figures agree with Professor Tichborne's, we will admit our error at once.

The Chairman said that when the whole quantity was replaced they had no fault to find.

Increase of Analyst's Salary.

At the last meeting of the Coleraine Guardians, Mr. R. J. Blake, the analyst, applied to have his salary increased from 10*l.* to 16*l.* a year. The Board compromised by giving Mr. Blake 15*l.* a year.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The Chemist's Legacy.

Mr. Robert Irvine, of Granton, whose death we announced last week (page 501), has bequeathed a sum (which when available will amount to from 25,000*l.* to 30,000*l.*) to Edinburgh University for the purpose of founding a professorship of bacteriology. Particulars are given in our abstract of the will (page 530).



MR. ROBERT IRVINE.

Business Changes.

Mr. James D. Walker, chemist and druggist, has acquired the business in High Street, Peebles, carried on for many years by Mr. George Morison.

Mr. William Russell, chemist and druggist, has purchased the business carried on until recently at 5 Alvanley Terrace, Edinburgh, by Mr. J. D. Walker.

Mr. Jas. Chapman, chemist and druggist, Kirkliston, has removed to Troon, and Mr. David Lister takes over the business at the former place.

Mr. Alex. Govan Reid, chemist and druggist, late of Torquay, has taken over the business at 84 Newington Road, Edinburgh, lately carried on by Mr. Blair Hill.

Messrs. Gibson & Co., chemists, Edinburgh, announce that in May they will open another branch at 13 Leith Street. This will be the fourth branch of the firm in the city.

Mr. Wm. S. Glass, pharmaceutical chemist, Edinburgh, has taken one of the shops in the new range of buildings at present being erected on the west side of North Bridge Street, Edinburgh, in which he intends to open a branch of his business. Mr. Blair Hill, chemist and druggist, who has relinquished his pharmacy at 84 Newington Road, is to manage the business. It is expected that the premises will be ready for occupation in May.

Edinburgh Chemists' Golf Club.

The fixtures for the season include competitions for the Captain's and club prizes, and the Gibson Handicap medal at North Berwick on the Spring holiday; for the Gibson Handicap medal, at the Braids on May 14, June 18, September 3, and on the Autumn holiday at Largo, where club prizes will also be competed for.

The Great De Wet Drive.

Mr. J. D. Horsburgh, the Volunteer compounder, who has frequently contributed to the *C. & D.* since he went to the front, participated in the second De Wet drive, and his experience of it is given in the *Scotsman* of April 1.

Glasgow Notes.

The American soda-water fountain has not yet made much headway amongst Scotch chemists, but several Glasgow shops now have them, and this season there are to be some new "installations."

The popularity and success of the Edinburgh Pharmacy Athletic Club have suggested the feasibility of a similar organisation in the capital of the West. In the meantime the project is in the incubatory stage.

A suburban chemist who put a fancy basket containing eggs stained in various attractive colours, and the legend "Easter-egg dyes, 1*d.* per box" in his window, was agreeably surprised to find that there was quite a run on what proved to be a seasonable commodity. He has resolved to develop this "side-line" next year.

The apprentice may not live, but he still lingers. An employer who was rummaging in his back-shop on a recent quiet Sunday evening, came upon a collection of improvised chemical apparatus and a note-book, from which it appeared that his industrious apprentice had been experimenting with Clyde water, in order to extract iodine from it. A patent may be applied for shortly, and then, good-bye to caliche and the Stassfurt deposits.

Chemists are warned against a male cocaineomaniac who is at present going around. His *modus operandi* is to present a prescription for 5*j.* 2-per-cent. sol. cocaine hydrochlor., and when the bottle is handed to him, draw the cork, and swallow the entire contents. Thereafter, he coolly informs the chemist that he has no money, and does not care if he is given into custody for fraud. The chemist, rather than have any bother, usually gives the fellow a piece of his mind and then lets him go.

French News.

(From our Paris Correspondent)

FIRE AND EXPLOSION.—News has been received in Paris that the wholesale drug-warehouse belonging to M. Van Overstraeten, rue de Malines, Louvain, Belgium, was destroyed by fire last week (March 25).

ANALYSING A GLACIER.—While the Pasteur Institute of Paris has from time to time astonished the world by the discoveries made in its laboratories, the chemists there find that it also fails to their task to destroy every now and then some popular fallacy. For instance, glaciers have usually been supposed to be free from those germs which tend to add zest to our daily life, but M. Binst, one of the head chemists at the Institute, has recently submitted to bacteriological analysis some ice obtained from the summit of Mont Blanc, and reports that on being melted the water contains germs that belong to the most diversified families of bacteria. M. Binst's theory is that the microbes are driven on the mountains by wind-storms.

THE CHEMICAL ANALYSIS OF SARDINE OIL.—The chemists of the Paris Municipal Laboratory having issued a report to the effect that certain firms who put up sardines in tins and advertised that they use pure olive oil for the purpose were using oil that was found on analysis not to be of the quality described, the police have prosecuted one of them, M. Emile Giff, a well-known Brittany sardine-packer. The defendant was, however, able to prove his good faith, and gave as his defence that the sardines themselves when tinned give off a certain quantity of oil and gelatin which mixes with the olive oil used, and somewhat changes its nature. As the sardines were in excellent condition and of good flavour, the summons was dismissed.

MORPHINE PROPAGANDA.—There was a little scene of an unusual character in the Boulevard Richard-Lenoir, Paris, last Sunday morning. A young man who was passing down that thoroughfare suddenly stopped and took from his pocket a case containing a bottle of morphine and a syringe. After giving himself several injections of the drug in the neck, he stepped up to a man who was sitting on a bench and commenced giving him an injection also. On being

remonstrated with at this curious proceeding, the morphine young man said, "Pardon me, sir, for having made you suffer a little, but I am of opinion that the use of morphine is not sufficiently widespread, and have undertaken the duty of convincing the public of the advantages of this liquid." He then made off, and a little further away stepped up to a policeman, saying, "My poor fellow, you are not well; I can see you are despondent. I can cure you with this syringe if you like." Gently, but firmly, the representative of the law led the young man to the police-station, and it transpired that his name is Emile Lemarchand. He is only 21 years of age, and he was entered on the charge-sheet as a lunatic wandering at large.

THE LATE PRINCE MÜNSTER.—The passing away of the distinguished diplomatist, Prince Müster, better known under his former title of Count Müster, has caused widespread sympathy both in Paris and London, his career during the last twenty-eight years of his life having been spent in those two cities as German Ambassador. The Prince was a familiar figure in the shops of both places frequently calling to make his own purchases; and I am sure that pharmacists in the neighbourhoods of Bond Street and of the Rue de la Paix will have an agreeable recollection of his commanding presence and kindly manner. I occasionally came into contact with the late Ambassador in the way of business, and found him to be just that kind of customer to whom one has pleasure in rendering service. He spoke English excellently, and one of his favourite phrases when using that language was "My dear boy"—an appellation bestowed on all and sundry.

Saccharin in France.

In the French Senate last week the subject of saccharin came up for discussion towards the end of the debate on the Budget. Before the Bill reached the higher Assembly the Chamber of Deputies had voted several articles introduced on the initiative of the Government regulating the use of saccharin, and prohibiting its use for all other purposes except for pharmacy, therapeutics, and the preparation of products not intended for food. The Finance Committee, regarding the question as serious, asked the Senate to separate from the Budget the items voted by the Chamber. M. Viger opposed this, and spoke at some length with a view to proving that the prolonged use of saccharin is detrimental to health. He held that its use as a substitute for sugar cannot be tolerated, also that there is the greatest urgency to take an immediate decision, for if the vote were delayed, manufacturers and others using saccharin for sweetening-purposes would simply lay in heavy stocks, thus rendering all precautions illusory. M. Poirier, a prominent manufacturing chemist, replied on behalf of the Finance Committee in a statesmanlike speech. He supported the request to separate from the Budget the articles voted by the Lower House on the ground that the measure taken by the Chamber of Deputies would affect not only saccharin, but also certain industries in which the use of this substance is indispensable. M. Poirier went further than this, and affirmed that saccharin is not detrimental to health. He contended that it does not compete with sugar. The Minister of Finances in turn declared that the use of saccharin in articles of food or drink is harmful according to the reports of various Committees of Public Hygiene, while, on the other hand, it is a prejudice to the interests of the Treasury, as saccharin is used instead of sugar, which bears an Excise tax. On the question being put to the ballot, the Senate confirmed, by 235 votes to 41, the proposal of the Chamber of Deputies limiting the use of saccharin. The Senate also specified the prohibition to the same extent of the use of all other artificial substances possessing a sweetening-power superior to that of the sugar-cane or beetroot, without having its nutritive qualities. The fact that the use of saccharin is to be a great extent confined in France to pharmacy and therapeutics seems to sufficiently prove that the object in view is rather to foster the sugar-industry, which is a source of revenue, than to protect the public health. Legislation here has already treated saccharin with no gentle hand, and its importation into France is prohibited, but there is no doubt that it continues to be brought over the frontier by contraband in

large quantities, and is largely in use for sweetening pastry, jams, and syrups. The Government hope to get at the root of the matter by making its use for such purposes an infringement of the law.

The Article of Law (No. 53) above mentioned was completed by the following:—

Article 54.—The manufacture of the said artificial sweetening substances can only take place in such places or works as are submitted to the permanent supervision of the Excise authorities. This supervision will be at the cost of the manufacturers. The cost will be fixed annually by the Minister of Finances, according to the number and salaries of the officers attached to each manufactory. (Voted.)

Article 55.—An account will be kept of the quantities manufactured, and sales can only be made to pharmacists for therapeutic and pharmaceutical purposes. For the use of saccharin for non alimentary purposes special regulations will decide the conditions of delivery and control of its use. (Voted.)

Article 56.—Pharmacists will be responsible for the quantities they receive; they cannot sell or employ the substances above-mentioned without a doctor's prescription. They must enter in their prescription-book the quantities received, those used for the preparation of medicine, with the designation of such medicine, the date of the doctor's prescription, with his name and address, the name and address of the client to whom the substances in the original form or the medicines dispensed with the said substances have been delivered. Every three months they must totalise the quantities received and those sold, either in the original form, or in medicines on a doctor's prescription. Infraction of this regulation will be treated as an offence against the Pharmacy Law.

The Speaker of the Senate read the Articles one by one, and here M. César Daval interrupted. He asked for the suppression of the third paragraph of Article 55, which, he contended, would make all the pharmacists in France agents of the Excise authorities, and he protested in their name against it. He had no objection to obliging them to inscribe saccharin amongst dangerous medicaments, but to force them to keep a quarterly account for the benefit of the Treasury of what they had bought and sold was out of the question. No pharmacist would consent to such a thing, but would prefer not to sell the product under the circumstances. M. Duval asked the Senate to suppress the paragraph in question. After remarks by other members, the Minister of Finances said: "I confine myself, gentlemen, to observing that when a principle is proposed the application must be carried out in its logical consequences. Perhaps it may be necessary—to allow full liberty to the exercise of pharmacy—to make one or two modifications in the wording of the Article in question; but from the moment you decide that saccharin can only be used for therapeutic purposes it is necessary to be certain that this is carried out. What we propose to require of pharmacists for saccharin is already imposed on them for other substances, such as phosphorus." He went on to say that the liberty formerly allowed to pharmacists in the sale of phosphorus led to great abuse, such as the fraudulent manufacture of matches, which is an important source of revenue to the French Government and a cherished State monopoly. He added that from the moment you accord what is, in his opinion, nothing more or less than a special favour to pharmacists, in authorising them to use a product prohibited by the law, you ought to submit them to a certain control. In so doing, he considered, there is nothing excessive. The Minister then went on to say that the first paragraph of Article 56, as presented, was an anomaly, the law requiring already that pharmacists should only dispense medicines on a doctor's prescription. Some discussion followed, and, finally, M. Maxime Lecomte presented an amendment as follows:—

Pharmacists will be responsible for the quantities they receive. They cannot sell or use the substances above mentioned except in view of a pharmaceutical use.

Paragraph 2.—They must enter on their prescription-book, &c., the designation of such medicine, the date, if necessary, of the doctor's prescription, &c. . . .

Paragraph 3.—Suppress at the end the words "on a doctor's prescription."

Paragraph 4 was maintained.

The amendment having been put to the Senate, it was decided to return it to the Finance Committee for consideration. Article 57 was then read by the President. It refers to the fines to be imposed for infringing the regulations

regarding saccharin. The fines will vary from 500f. (20l.), as a minimum, to 10,000f. (400l.) maximum, but this proposal was returned to the Committee, as were also Articles 58 59 and 60, which treated of matters of detail. In reply to a question by M. Poirrier, the Minister of Finances said that holders of stocks of saccharin at present would be required to declare them, and would be given facilities for disposing of such stocks after due guarantees had been obtained for preventing fraud.

South African News.

Cape Chemists and the Martindale Memorial.

(Cablegram from Our Special Correspondent.)

CAPE TOWN, April 2, 140 P.M.—The Pharmaceutical Society of Cape Colony at a meeting just held considered the desirability of participating in the memorial to the late William Martindale. The meeting unanimously resolved to support the movement, and the Secretary was instructed to write to Bloomsbury Square, saying that the Society will contribute towards a memorial scholarship.

IT is proposed to establish a soap-factory at Congella, Durban.

A PATENT for "an approved apparatus for the distillation of water" has been applied for by James Hogan, East London, Cape Colony.

MESSRS. E. W. CARLING & CO., colonial merchants, St. Dunstan's Buildings, St. Dunstan's Hill, London, E.C., have been appointed London agents of the Johannesburg Town Council.

OF NO AVAIL.—The Cape Government has declined to confirm the findings of the Colonial Medical Council that Dr. Scholtz be struck off the list of medical practitioners in the Cape Colony (see *C. & D.*, February 1, page 187), and notice to that effect was made through the Press on March 4. Dr. Scholtz died on March 7.

BUSINESS CHANGES.—Messrs. McVittie & Scruby is the style of the new firm who have opened business in the Market Square, Harrismith, O.R.C. Mr. McVittie was formerly manager to the late Mr. Glaister, while Mr. Scruby was in business in Johannesburg.—Mr. H. L. Stonham has bought the branch business of Mr. F. W. C. Thomas, at Lansdowne Road, Claremont, Cape Colony.

A BUSINESS FOR SALE.—Advices from Natal state that the executor of the estate of the late Mr. J. W. Gowthorpe, chemist, is desirous of disposing by private treaty of the deceased's drug and mineral-water business in Newcastle as a going concern. The premises, on a portion of Scott Street, in the centre of the town, will also be sold, or let to the purchaser. A lucrative business, it is stated, is now being done.

GERMAN EXPORTS.—The following figures relate to the exports of cyanide of potassium, glycerin, and perfumery from Germany:—

	Cape Colony and Natal			Transvaal		
	1899	1900	1901	1899	1900	1901
Pot. cyanide (tons) ..	88	80	61	1,012	193	—
Glycerin (tons) ...	—	—	182	—	—	—
Perfumery (tons) ...	16	26	41	—	—	—

LICENSED.—The following have received licences to practise as chemists and druggists in the Cape Colony: William James Stronge (Irish certificate), Archibald Masterton, George Smith Houghton, George Francis Tutt (British certificates). Alexander Thomas Fraser, M.B. (late of Buxton, England), has been authorised to practise as a medical practitioner at the Cape.

PERSONALITIES.—Mr. Alfred H. Mathew (of Messrs. Heynes, Mathew & Co., Cape Town) is expected in England presently, and will visit the United States before returning to Cape Town.—Mr. W. Dawn Copley (of Smart & Copley, chemists, Bulawayo) is due to arrive in London about the middle of May.—Mr. Frank Turner (of Turner & Co., chemists, Pietermaritzburg and Johannesburg) is now back in the Golden City.—Mr. W. A. Steggs, chemist and druggist, who has hitherto managed the business of Messrs. Hazell & Son, chemists, is now a partner in that concern.

COMBATING THE PLAGUE.—A Blue-book of 243 pages reaches us from the Cape, containing the report and proceedings, with annexes, of the Cape Peninsula Plague Advisory Board, which was appointed to advise the Cape Government on matters connected with the suppression of the outbreak of bubonic plague last year. The report demonstrates how thoroughly suppressive measures were carried out, and how successful the prompt and vigorous action of the authorities proved. Specially interesting to chemists are the precautions to householders recommended by Professor Simpson, and the detailed bacteriological examinations of Dr. Edington. Amongst other precautions, Dr. Simpson advised the destruction of all mice and rats. Rodents caught in traps or found dead should have Jeyes' fluid thrown over them and the traps placed in a pail of Jeyes' fluid. Kitchen refuse should be burnt, or carbolic acid poured over it daily in the dust-bin. Yard and surface drains should be watered daily with a solution of carbolic acid, and the disinfectant used freely in the cleansing of cupboards, bedding, carpets, &c. Fresh air and sunlight in plenty should be let into all living-rooms; personal cleanliness is insisted upon, and in washing the hands the use of carbolic soap, or the addition of a tablet of chinosol or other disinfectant to the water, is recommended.

East Indian News.

PERSONAL.—Mr. E. Seller, representing Messrs. Burgoynes, Burbidges & Co. (London), was in Ceylon when the mail left (March 13).

INDIAN QUININE FOR SOUTH AFRICA.—India is now supplying quinine to South Africa, an order for 5,000 oz. of sulphate having been placed with the Government quinologist, Sibpur.

CHANGE OF TITLE.—The business of Messrs. Amitrial Nathoo Thakor & Co., wholesale and retail druggists, at 60 Kalbadevi Road, Bombay, will in future be carried on under the style of Thakordas Nathoo & Co. at the same address.

OPIUM IN BURMA.—It is stated that the Burmese Government will abandon the yearly auction of the opium-farms; and it is assumed that there may be an attempt made by the authorities to run the retail opium-shops departmentally.

HEMP-DRUGS.—Messrs. Arbuthnot & Co. have secured the Mysore contract for the wholesale supply of ganja, charas, bhang, and other intoxicating drugs prepared from the hemp-plant for the next five years. Messrs. Parry & Co. were believed to have offered the most favourable terms, and to be sure of the contract, but events have not been according to expectations.

MORE VETERINARY SCIENCE WANTED.—According to the *Madras Times*, considerable dissatisfaction appears to exist as to the neglect of the Madras Government in the encouragement of veterinary science. The Government of India, the *Times* asserts, has not the strength of mind to insist that the Civil Veterinary Department shall be anything more than a name. Hence the science and practice of veterinary surgery in Madras is said to be in a parlous state.

MR. F. H. GLEW, chemist and druggist, Clapham Road, S.W., contributes a paper to *Photography* on some experimental photographs he has taken with radium. Radium of good luminous quality costs 5/- per gramme.

American Notes.

A SIDE-LINE.—Some of the New York drng-stores are being converted into branch circulating libraries by fitting them with revolving bookcases to hold 120 volumes. These volumes are to be changed each week, and members may take any book on loan by dropping 5s. in a slot.

UNSATISFIED.—The Baltimore correspondent of the *Pharmaceutical Era* states that litigation in connection with the liquidation of the Charles A. Vogel Company's assets is not yet over. Creditors had filed exceptions to the allowances for attorneys and trustees contained in the auditor's report, and Judge Stockbridge scaled down the total by over \$16,000 on fees and commissions. The creditors, however, do not consider the reduction sweeping enough, and have taken an appeal from the finding of the Court.

CALIFORNIA OLIVE OIL.—The Southern California Olive growers' Association expects to control the olive-oil industry next year. It is intended to have branch associations in the several olive-growing centres. The object of the association is to establish prices which will be fixed to all packages of oil and pickled olives produced by its members. The present crop of the Southern California groves is one of the largest ever gathered. From 1,100 acres owned by the Capital Olive-growers' Association near Fernando there will be produced more oil than ever produced before in California in one year.

HARRYING THE GROCER.—At the instance of the State Board of Pharmacy, several grocers in San Francisco have been arrested for violating the provisions of the State law prohibiting the sale of poisons unless made by registered pharmacists. The special charge brought against the parties in question was the sale of wood alcohol, which when sold by a registered pharmacist should have the name of the vendor on the label and the sale should be recorded in the registry-book. It is one of the peculiarities of the law in San Francisco that sales of wood alcohol must be registered, and so active a poison as carbolic acid dispensed without any record being made.

CAPTURE OF SMUGGLED OPIUM.—The United States Customs at Portland, Ore., have effected one of the largest seizures of smuggled opium ever made at that port, consisting of 1,250 tins, which, without duty, cost the smugglers about \$4,500. The lot will bring about \$10,000 when auctioned by the Government. The opium came from British Columbia, but was shipped to Portland from Seattle over the Northern Pacific Railroad. The smugglers' plan to land the opium in Portland was to send it with a consignment of household furniture, bedsteads, tables, chairs, and kitchen utensils, and with them three boxes which might naturally be supposed to contain dishes or books, but which contained the 1,200 tins of opium.

A LANDMARK DISAPPEARING.—The drug-store of the Theodore Metcalf Company, at 39 Tremont Street, Boston, which has been famous in the history of Boston for three-quarters of a century, is to be demolished and replaced by a building more suited to modern requirements. When Dr. Oliver Wendell Holmes (the genial "Autocrat") began his career as a physician, he hung out his sign almost directly over that of Mr. Metcalf, the pharmacist. Quoting Dr. Holmes's own words, "When I began to practise I was as anxious to get a fever as Mr. Metcalf was to get a favour; what business we could not attend to between us was looked after by the sexton across the street." The presence of a graveyard directly opposite was considered a serious drawback to the young doctor and the young pharmacist in their early efforts, but it did not prevent either from securing the rewards to which each was entitled. Dr. Holmes's writings are, perhaps, better known to the world than his skill as a physician, but Mr. Metcalf soon built up the dispensing-business of Boston, and it has gone on increasing as the years have rolled. The new building will be on exactly the same site as its predecessor, and it is expected that it will be ready for occupation in about twelve months. Until the new building is completed the business will be temporarily located at 36 Court Street, adjoining Tremont Street.

Colonial and Foreign News.

COLOMBIA INCREASES IMPORT-DUTIES.—A despatch from Colon states that the Colombian Government has increased the import-duties 30 per cent.

NEW MINERAL WATER.—Apotheker Josef Simkovich, of Klausenburg, Hungary, has received permission from the Government to introduce into commerce a medicinal water—Rézsa-Heilquelle—obtained in the neighbourhood.

PROJECTED SWISS TARIFF.—A new Swiss tariff, is to be brought before the Conseil National and the Conseil d'Etat in May. The new schedule of duties contains 1,123 articles, as against 723 for the conventional tariff and 476 for the general tariff now in force. A marked increase is noted in 500 of these 1,123 articles, especially in the case of agricultural products.

NO ROOM FOR CHEMISTS—A *Times* correspondent describes Liberia, the negro Republic on the West Coast of Africa, as "the fairest land in the whole continent of Africa." "A commercial botanist," he adds, "would discover drugs of value, for there are few diseases which the native doctors cannot cope with by the aid of the products of the Liberian forest."

CHEMICALS FOR SPAIN.—The *Gaceta de Madrid* of March 6 contains a Royal Order authorising the Grenada powder-factory to purchase by private negotiation 87 tons of gun-cotton, 115 tons of sulphuric ether, and 10 tons of raw cotton from certain German firms, and the following without indication of market—namely 85 tons of alcohol, 4 tons of acetic ether, 40 tons of nitric acid, and 40 tons of sulphuric acid.

OIL TENDERS WANTED.—Tenders are invited by the Intendant of the Norwegian Navy, to be received by April 12, for the following oils: 20,000 kilos. sweet oil (not more than 8 per cent. acid), 30,000 kilos. marine oil, 2,000 kilos. castor oil, and 3,000 kilos. lamp-oil, of good qualities. Conditions of tender may be examined on personal application at the Commercial Department of the Board of Trade.

BRAZILIAN DENTAL AND MEDICAL DIPLOMAS—A federal statute in Brazil provides that all physicians, surgeons, and dentists of foreign extraction who desire to practise their profession in any part of the country must first pass a prescribed examination at the medical colleges at Bahia and Rio de Janeiro. These examinations, which include languages and other branches not usually found in a medical curriculum, are said to be so severe that few foreigners have any chance of passing them successfully. It is now reported that this law is to be more rigidly enforced hereafter, especially in the case of dentists. Such British or American dentists as have been practising in the country may now be required to go to Rio de Janeiro and pass examinations; and although Brazil supplies a very profitable field for medical practitioners, the examinations are said to be so severe as to necessitate two or three years' extra preparation.

LAGOS NOTES.—A Ladies' League has been formed in the colony of Lagos, the main object of which is the administration of quinine to children and the combating of infant mortality.—A meeting of the Legislative Council was held at Government House, Lagos, on February 17, when the Bill entitled "An Ordinance to Regulate the Dispensing and Sale of Drugs and Poisons" was read a second time. The Council then went into Committee, and the Bill was considered clause by clause, and amended in several particulars. The Bill having passed through Committee with amendments, progress was reported, and Council resumed. His Excellency Sir William MacGregor, Governor and Commander-in-Chief, informed members that it was not desirable to proceed further with the Bill at that meeting on account of several alterations, but it should be held over till next meeting, when members would have had clean printed copies as amended. It is understood that the Ordinance has been so modified that practising druggists of good standing will only be required to produce a certificate of efficiency from a duly qualified medical practitioner in order to obtain a licence, and the prime stumbling-block to the passing of the measure (see *C. & D.*, February 22, page 307) has thus been removed.

Winter Session.

Dispensing and Prescribing.

As briefly mentioned in our last issue, the Bradford Chemists' Association on March 25 discussed dispensing and prescribing questions. The PRESIDENT (Mr. Hanson) led off the discussion by stating that rightly the dispensing of prescriptions belongs to the chemist, and the work requires a broad and liberal education, possession of precise technical knowledge, and the employment of a high degree of operative skill. Many physicians who formerly expected their prescriptions to be made up by the chemist, now write a prescription only when they have a poor patient and desire the chemist to share in the charity. One cause which has contributed greatly to this, he said, is the number of persons employed in pharmacies who have infringed upon the province of the doctor and thus brought discredit upon the whole profession. Medical men argue that the pharmacist is incompetent to do dispensing, or often hands it over to his assistant or apprentice. The increase in the number of low-grade medical colleges and a consequent over-production of graduates of corresponding quality is also a factor in the case. Manufacturers also make a specialty of supplying physicians with ready-made prescriptions, and do all they can by pamphlets and pocket-books to supply the physician with ready-to-hand information. This aspect of the question was enlarged upon, all its iniquities being exposed, and Mr. Hanson proceeded to make a scathing exposure of the conditions of dispensing in doctors' surgeries. He added that hundreds of instances had been recorded in which the compounding of the prescription as written by the physician would have been almost certainly followed by a fatality. Would the physicians have avoided those mistakes if they had dispensed the medicines instead of writing the prescriptions? The only effective precaution against such mistakes is the interposition of the learning and judgment of a competent dispenser between the physician who prescribes and the patient who takes the medicine. He felt sure that every chemist had had cases of wrongly dispensed medicines, overdoses in prescriptions, and incompatibilities too numerous to mention brought to his notice, and he thought that in the near future the Pharmaceutical Society should make it their business to inquire more seriously into this trespassing on the preserves of the chemist; it is the duty of every chemist, he concluded, to try to promote good feeling between doctors and chemists, and to show the medical profession that it would be to their interests to let the dispensing of medicines be done in its proper place by a properly qualified chemist.

Mr. MARSHALL remarked that if some chemists had to live on dispensing they would not be able to live at all.

Alderman DUNN said that it would not do to blame chemists for prescribing while the doctors do their own dispensing.

Mr. SILSON said the chemist had established the right to prescribe, and there was no doubt that he would keep that right. The difficulty was that very few of the chemists in Bradford could live if they depended upon dispensing.

Alderman DUNN suggested that the local medical societies should be approached on the subject.

Mr. PENTY said he had reason to believe that any suggestion of the chemists on the subject would have great weight with the medical societies.

Mr. BAILES and Mr. MARSHALL spoke of the quantity of dead stock which the chemist often had to carry in consequence of purchasing bottles of drugs to deal with prescriptions.

The PRESIDENT replied that they might find it of very considerable mutual benefit in an exchange of lists. There were sixty or seventy of them in Bradford, and they ought to be able to arrange so that they would have very little dead stock, and accommodate each other materially.

It was decided that the suggested exchange of lists should take place, but no action was taken with regard to the proposed consultation with the medical societies.

A vote of thanks having been accorded to the President, Mr. WADDINGTON raised certain questions in regard to the management of the *Pharmaceutical Journal*, and as to the

proposed federation for Yorkshire, and it was determined to discuss these at a meeting to be held on April 8.

The Public Dispensers' Association.

At the meeting held on Wednesday, March 26, at St. Bride's Institute, Ludgate Circus—the President (Mr. W. Duff) in the chair—there was a fair attendance although, considering the important business on hand, it was not what might have been expected, owing doubtless to the rather inclement weather. The CHAIRMAN stated that the business of the evening was the proposed alteration in the prospectus of the Association. The first point in the prospectus was the title; this, the President said, it was proposed to retain unaltered. Mr. GOODALL, however, proposed that this should not be done, as the reference to poor-law was distasteful to most of the members. He moved that the title be altered to "The Public Dispensers' Association." Mr. SPENCER seconded the proposition.

Mr. DUNSTAN moved, as an amendment, that the old name be retained, for, said he, the Poor-law members would entirely lose their identity if the name was omitted, and, further, it was the old Poor-law Dispensers' Association that formed the nucleus around which the present one had grown. Mr. LINDSAY supported this view. The PRESIDENT then put the matter to the vote, and there was a large majority for the proposed alteration, all except two of the poor-law members present voting for the change.

Another change was to insert the words "all dispensers in public institutions shall be eligible for membership." The Council wished to draw attention to the fact that by public institutions, hospitals, infirmaries, asylums, all Government institutions, provident and other dispensaries were intended. It was also agreed to add to the clause which states "to provide basis for consultation and united action in all cases of difficulty arising out of the nature and in the discharge of their duties," the words "and to provide legal assistance if necessary." The Council also desired to omit a poor-law secretary from the list of executive officers, it being felt that there would be less confusion if only a general secretary were retained. As each section of the Association is represented upon the Council it was thought that special business would be well looked after by them.

Mr. DUNSTAN moved that the Poor-law Secretary be retained, but on being put to the vote it was found that the majority were in favour of the omission.

The last part of the prospectus states that provincial dispensers are cordially invited to become members, and to take an active part in the affairs of the Association by forwarding papers for discussion and communications of general interest.

The next business on the agenda was a discussion of the "Interim report of the Dispensing Committee of the Pharmaceutical Society." Mr. NOAD CLARK said that he would like at the outset to draw attention to the fact that, being an interim report, much criticism could not be indulged in, but he felt very disappointed that the Council of the Pharmaceutical Society appeared so satisfied with the state of affairs. This proved to be the general opinion of the meeting up to closing-time, and all present were unanimous that the members of the Association should work together for their mutual interest, and that much could be achieved by so doing.

The discussion was adjourned until next meeting.

Chemists' Managers' and Assistants' Society.

At a meeting of this Society held at the Horseshoe Hotel, Tottenham Court Road, on March 26, with the President (Mr. C. E. Pickering) in the chair, a paper was read by Mr. GEORGE CULLWICK (Treasurer) on "Chemists' Prices—old and new," in which he referred to the great differences in prices charged by the chemist of twenty years ago, and his successor of to-day. He particularly complained of the diversity in prices charged by chemists at the present time. No two chemists, he said, charged the same price for the same article. Patent medicines, for instance, were to be had at 1s 1½d, 1s. 1d, 1s., 11½d, and 10½d, according to the idiosyncrasy of the seller. Such ordinary everyday things as methylated liniments and lime-water were sold at various

prices according to locality. He urged chemists to pay much greater attention to their window-dressing, and they would find an appreciable increase of trade. The PRESIDENT also discussed these matters at same length, and insisted strongly that chemists ought at least to charge good prices for their skill in dispensing, just as a doctor charges for his professional attainments. Mr. JONES considered some of the comparisons made by Mr. Cullwick to be odious. He thought the impression which appears to prevail, that the "stores" are in the habit of dispensing anyhow, is an entirely mistaken one. He disagreed also with the opinion expressed that the old-fashioned chemist will keep the dispensing from the drug companies. The PRESIDENT said from his own experience he was convinced that nothing sold in "stores" was up to the standard of such a place as the Apothecaries' Hall. The general opinion was, however, that Mr. Cullwick's paper was a very instructive one.

Cardiff Pharmaceutical Association.

A MEETING of this Association was held on March 26, under the presidency of Mr. Robert Drane. The first subject on the agenda was that of a

CURRICULUM AND DIVIDED MINOR.

The PRESIDENT said he was opposed to an enforced curriculum at the present moment. The whole scheme was premature. When an enforced curriculum was realised it would be more difficult for students to enter the ranks of the drug-trade than to qualify for the career of a general practitioner in medicine. By adopting such a system now he considered they would render it almost impossible to obtain apprentices. The public were not demanding greater qualification in chemists than they at present possessed. He admitted that as craftsmen they were losing ground and were rapidly being reduced to the position of petty shopkeepers, and that the only way out of the difficulty was by some method of enforced curriculum; but at present they were not ripe for that. Mr. A. HAGON thought if they were going to divide the Minor examination the need of an enforced curriculum was not so pressing. The discussion was continued by Messrs. GERHOLD, R. GRIFFITHS, and A. J. BELLAMY. The last-named read a letter he had received from Mr. G. F. Merson, Hon. Secretary of the Federation of Local Pharmaceutical Associations, in which he said: "It is generally conceded that the present Minor examination is too much of a cram, and that any means whereby the heavy mortality could be obviated would be of benefit to the trade as well as to the individual student." Mr. Bellamy said for his own part he thought that if apprentices were properly treated and got the training they should do, there would not be so many failures in the Minor examination.

The PRESIDENT did not think that the percentage of failures was very much larger than in the medical profession. Eventually a recommendation that the Minor examination be divided was agreed to.

Mr. A. HAGON then proceeded to discuss the President's verses entitled

"BUNKUM & CO."

with reference to patent medicines. It seemed to him (Mr. Hagon) a grievous thing that a box of pills or tablets which were of no more intrinsic value than a few pence should be sold at 2s. 6d. He objected very much to the sale of these remedies without a clear statement as to their contents, and without any opportunity being given to the public to arrive at an estimate of their cost. He thought that some such plan as obtained on the Continent should be adopted in this country, and, further, that for handling these goods they as chemists should receive a minimum profit of at least 20 per cent. He agreed with the President that ridicule was one of the best weapons they could employ to remedy the present state of things, but he would go to the Legislature and ask them to adopt the continental plan and order the exact recipe to be printed on every package of stamped medicine. He would go even further and demand that the preparation and sale of all medicines for human consumption should be limited to qualified chemists.

Mr. R. MUMFORD thought they should confine themselves to what was practical. To memorialise Parliament against

any business which brought in a revenue close upon 300,000*l.* a year would be futile. Until someone started cutting the prices of patent medicines, he never heard a word against them, but now when they had to hand over a 2s. 6d. article at a profit of 3*d.* they began to tell their customers that they had a much better article for 1*s.* (Laughter.) For his own part he thought it was very convenient to have a few things put up ready for sale, especially when they were very busy, for it saved them the trouble of having to make a mixture themselves. In his opinion any attempt to check the sale of patent medicines would be about as successful as that of Mrs. Partington in trying to keep back the waves of the ocean with a mop.

The PRESIDENT thought Mr. Mumford had hit the point in saying that when they were making a good profit by the sale of lies they were content to deal in falsehood. That, however, had never been his usage for at least a quarter of a century. He had never once given any countenance to the sale of patent medicines, and though the usage of the trade had compelled him to be a distributor of these things, it had always been under protest. This dealing in patent medicines and the publication of lying advertisements were the damnation of their trade.

Mr. R. Griffiths was appointed Secretary to the Buying and Selling Bureau.

A vote of thanks was accorded to Mr. W. J. Sanders, the late Hon. Secretary, for the gift of a number of volumes of THE CHEMIST AND DRUGGIST and other books; and it was decided to hold a smoking-concert on the second Tuesday in April.

Torquay Chemists' Association.

THE first annual meeting of this Association was held on March 20 at the Pavilion Hotel, Torquay, Mr. R. Sloman presiding over a good attendance. The HON. SECRETARY (Mr. J. Young) presented his

ANNUAL REPORT,

in which he said the Association had not only created a bond of friendship amongst the chemists of Torquay, but it had undoubtedly benefited them in a financial sense. The scheme of co-operative buying adopted by many of the members had proved a great success. The HON. TREASURER (Mr. Bourne) reported that the Association was in a sound financial position.

The following officers were elected for the ensuing year: Mr. Knight (President), Mr. Ness (Vice-President), Mr. Young (Hon. Secretary), Mr. Horner (Hon. Treasurer), Messrs. Cutmore, Lee, March, Newlyn, Rawling, and Sarson (Paignton) as Executive Committee.

ENFORCING THE STAMP ACT.

A discussion then took place in regard to the recent raid made by the Inland Revenue authorities on the Torquay chemists for offences under the Stamp Act. The chemist who opened the discussion said he had only a short time ago purchased an old-established business in Torquay, and amongst the literature in stock at the time was a circular enumerating a list of articles prepared by the firm. The wording of the circular wrapped around one of the preparations made the whole of the articles sold liable to stamp-duty, and the authorities demanded penalties amounting to 90*l.*, but accepted 10*l.* Another chemist stated that he received orders by post for numerous articles, amongst them being one for "carbolic dressing," where the words "carbolic dressing" were simply written upon an ordinary poison-slip. In course of time came the usual official missive inquiring as to what reasons could be advanced for the non-payment of penalties incurred amounting to 130*l.* It was pointed out that no amount of word-twisting or reasoning could make the "carbolic dressing" liable to duty, and the result was that the penalties were reduced to 20*l.*

In another case 90*l.* was demanded as penalties for nine articles sent by post. Amongst the goods sold was a box of "Blank's Glycerin Lozenges," which was held to be liable, although the same label had been passed as not liable some years ago. After some correspondence the sum demanded was reduced to 10*l.* The speaker considered this was a case which should be defended by the Pharmaceutical Society, as

they took the guineas from chemists, but, to use an inelegant though expressive term, they were not worth "two penn'orth of gin" in helping the trade.

Mr. KNIGHT quoted a case which happened some years ago, where a bottle of essence of ginger, the label of which bore the words "Beneficial after sea-bathing," was held to be liable to duty. He paid one guinea under protest, as he considered, like many others, that it would be unwise to fight the Government.

Mr. SLOMAN gave his experience with respect to a skin-lotion label, where the words "Skin irritation" were held to make the lotion liable to duty, and 10*l* was demanded. After protesting that it was exempt under "toilet-articles" class, the authorities withdrew their claim on condition that it was stamped in future.

Mr. YOUNG considered that if the C.D.A. could defend Medicine-stamp Act cases, it was clearly the duty of the Pharmaceutical Society—as the representative body of the trade—to undertake this work. At least half the chemists in Torquay had withdrawn their support from the Society on account of its apathy.

Mr. KNIGHT suggested that the Pharmaceutical Society should attempt to obtain a clearer interpretation of the Act, as no one seemed able to understand it in its present form. After a long discussion it was unanimously resolved that a letter be sent to the Pharmaceutical Society calling attention to the series of frivolous and vexatious prosecutions instituted by the Board of Inland Revenue against certain members of the Society, and expressing the opinion that the Pharmaceutical Society should take steps to actively defend certain cases in the interests of the trade. Upon the suggestion of Mr. YOUNG it was resolved that a letter be sent to Mr. Leyland Barratt, M.P. for Torquay, inviting him to ask a question in Parliament as to whether half the fees recovered by Inland Revenue authorities go to the informer.

Edinburgh Chemists' Trade Association.

A MEETING of this Association was held at 36 York Place, Edinburgh, on March 27, Mr. David McLaren (in the absence of the President) in the chair. In view of the fact that the British Pharmaceutical Conference is to be held at Dundee this year, it was agreed not to have the annual excursion.

INLAND REVENUE STAMPS.

Mr. BOA brought forward the question of whether the Inland Revenue should be approached with the view of securing that stamps issued by them for the use of chemists and druggists be perforated and gummed. A member of the trade had drawn his attention to the fact that in the case of a chemist putting up a number of dutiable proprietaries the way in which the stamps were sent out necessitated a considerable amount of careful trimming. If they were sent out like postage-stamps it would be a great convenience to those who used them. He had made representations to the Revenue authorities in Edinburgh on the subject, and had been told that if several of them made a representation at headquarters they might get what they wanted, otherwise nothing would be done.

The members present said they did not use any, or very few, of those stamps; and as the gentleman who mentioned the matter was not a member of the Association, it was agreed to take no action.

Mr. BOA then opened a discussion on the

SALE OF POISONS.

He said there were possibilities of chemists inadvertently doing things in connection with the sale of poisons which might have a prejudicial influence on their future interests. In having put upon them the responsibility of the sale of poisons chemists were at the same time charged with a certain amount of duty to the public. The right to sell poisons, however, gave them no right to restrict the sale of poisons. If anyone came to them for twopennyworth of laudanum or chloroform, he should say the first principle they had to act upon was the right to assume that the purchaser was perfectly sane, and that unless there was some obvious reason for objecting, the retailer should supply what was asked for.

The CHAIRMAN: Do you start at a pennyworth?

Mr. BOA said he did not regard the quantity at all. If a man asked for a halfpennyworth of poison he considered a chemist was in duty bound to supply it unless there was some good reason to the contrary. The objects of the passing of the regulations were, it seemed to him, to be that poisons should be sent out under conditions which, in the hands of people in their senses, would prevent the stuff from being used with any disadvantage to anyone. That, to his mind, did not justify a chemist in refusing to sell poison unless for some very obvious reason. If a man was insane or drunk he should not be supplied, but otherwise the chemist was not justified in refusing to sell the poison. The chemist was in the same position as the hotel-keeper, who was bound to sell refreshments if he was asked for them. If they made unnecessary objections in selling poisons, they might quite rightly have people calling for greater facilities in the getting of poisons. There were many poisons used for remedial purposes, or in the arts, and to put any obstacle in the way of people getting such poisons would be extremely injudicious on the part of the trade. The object of the poisons regulations was not to restrict: the object was the safety of the public. They did not carry through legislation for people who were insane: the laws were made for the people who were supposed to be in their senses. The public was advancing in education, and as people were more highly educated they were more capable of dealing with dangerous subjects with greater safety, and the procedure which might have been quite right twenty years ago was probably out of date at the present moment. When any member of the public wanted a poison in Part I. of the schedule—say, perchloride of mercury—for some legitimate art purpose, if he was not known to the chemist he could not sell the poison to him without a witness, but it would be a right thing for the chemist to make it as easy for that man to get what he wanted as possible. He sometimes got handed in to his place of business a poison-bottle labelled "Laudanum." He considered it was an extremely injudicious thing to put laudanum into a poison-bottle and label it with the glaring red label used for articles intended for external use. By doing so they did away with the main object of using a poison-bottle—that was, to draw a distinction between what was for internal use and absolutely for external use. He did not think it right to put laudanum into a poison-bottle, especially if it was labelled "Dose—10 to 20 minims." He believed fear of the coroner very largely conducted to many chemists being disinclined to sell poisons except to regular customers. If anything went wrong the coroner sometimes took the opportunity to cast aspersions on the chemist; but if a chemist supplied poison according to the regulations, no man had any right to say anything against him, and if anyone did say something against him under such circumstances it was the duty of the Pharmaceutical Society to see that its members were protected.

Mr. FORRET agreed with Mr. Boa. Chemists, he thought, were not legally entitled to refuse poison to anyone whom they knew. They were the legal vendors of poisons, and if anyone whom they knew came in for a poison he thought they were legally bound to sell it, unless, of course, the purchaser was not sure of the name of the article wanted. He would not hesitate to send a child for a written note, and on anyone asking for oxalic acid or salt of sorrel he inquired what it was for. Perchloride of mercury for photographic purposes he sold right away, registering the purchase.

In answer to a question as to how he would treat a sale of 2 oz. of laudanum, with directions for 20 drops to be taken internally and four tablespoonfuls to be mixed with a poultice, Mr. Boa said he would put the laudanum into two bottles.

Mr. MCPHERSON also agreed with what Mr. Boa had said. He thought they ought to construe the Act and regulations liberally without departing from their spirit. The regulations were certainly puzzling at times, and would require overhauling by people having some practical knowledge of the question. In a sale of laudanum for internal use it might be put into a plain bottle and labelled "Poison." Tincture of opium for a lotion would be put into a poison-bottle and labelled "For external use only." It was not compulsory to put carbolic acid into a ribbed bottle, but it was compulsory to so put carbolic lotion above 3 per cent. With regard to the coroner, they had no coroners in Scot-

land, and he did not see that the Pharmaceutical Society had any duty in England, except that Mr. Bremridge might send a letter to the offending coroner.

Some further conversation took place on the various dispensing practices, and on the selling of poisons for agricultural purposes.

Mr. RUTHERFORD HILL said it seemed to him that the public were entitled to expect the qualified seller of poisons in the district to keep the poisons that were desired, but he did not think he was bound to sell them. The liberty and discretion was left to him to refuse where he thought proper, but he ought to stock them. It had been said that the poisons regulations should be observed. He thought that wanted drawing attention to, as he was afraid there was a great deal of disregard of these provisions, which was being quoted against them. Articles, he believed, were being sold which came under the provisions of Section 17, Part I., of the schedule. These ought not to be sold to strangers, and ought to be registered if sold. He was afraid that regulation was being disregarded. The other point was that when they did work out the regulations framed under the Act of Parliament they got themselves into endless difficulties. His opinion was that there should be no such regulations by Act of Parliament. The restriction of the sale of poisons should be left to educated persons to carry out with commonsense and judgment. All attempts at increasing mechanical restriction should be sternly resisted.

PRESCRIPTIONS OF POOR PATIENTS.

The next item of business was a proposal by Mr. C. F. HENRY to circularise medical men as to specially marking prescriptions of poor patients, but he suggested as the evening was advanced it should be left over till next meeting. He said that twenty years ago it was a common practice for medical men to mark prescriptions, but the practice had apparently lapsed completely. He thought the Association should direct attention to the fact that chemists did make medicine cheaper to those not so well able to pay for it as others. It was agreed to postpone this discussion, and the meeting terminated with a vote of thanks to the Chairman.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING was held at 33 York Place, Edinburgh, on Wednesday, March 26, at 9.15 P.M., Mr. J. G. Slater (President) in the chair.

Besides the paper by Mr. Lyon (*C. & D.*, March 29), Dr. GORDON SHARP read one on

DOSAGE.

Dr. Gordon Sharp first gave the dictionary definition of dose and dosage, and spoke of the object of administering doses of a drug or chemical agent. How a dose exactly acts is not known, but it may reasonably be assumed to act by modifying the normal action of the cell. Some drugs at least form chemical compounds with the tissues in much the same manner as albumin and the metals. He then went on to speak of the methods of administration, dividing the subject into two parts—(1) by the direct method, when drugs are applied to the skin, as mercurial ointment, when the tissues directly absorb the mercury hypodermically, or injected directly into the blood-stream; (2) the indirect method, when drugs are administered by the mouth, or by the bowel in the form of enema or suppository. These methods were then considered in detail, the following being the remarks on hypodermic medication:

The hypodermic needle was first introduced by Alexander Wood, an Edinburgh surgeon. It is limited in its application, and is chiefly used in the exhibition of the active, soluble, and potent glucosides and alkaloids. It is rapid, certain, and more dangerous than the other methods, hence the dose is smaller, and greater care has to be exercised in using it. The tissues soon become saturated by a drug given in this way. If we take morphine as an example, we find the tissues are rapidly saturated with the drug, and elimination is slow, and the risks of fatal poisoning are greater than when given by the mouth. A dose of morphine given by the mouth is soon eliminated by the kidneys, whereas a dose given under the skin is only slowly eliminated, and the morphine instead is passed round the circulation and so produces a continuous action till every tissue may become soaked

and paralysed. In fact, given in this way morphine appears to act like pepsin in another connection—that is, it can be used by the tissues over and over again. It is known that if one makes a solution of pepsin containing the normal proportion of hydrochloric acid, and then make it digest its maximum of albumen, fresh albumen can afterwards be added almost indefinitely provided the solution is diluted and hydrochloric acid added in normal proportion.

After considering the relative potency of drugs, Dr. Gordon Sharp passed on to certain important factors influencing dosage—age, sex, race, climate, and individual peculiarity.

The dose for one year is generally reckoned as one-twelfth or one-thirteenth of the adult dose. Take the twelfth. This gives the age in years as numerator and denominator, but to the denominator twelve is added. If we take the dose for two years as an example, we get an equation $\frac{2}{2+12}$, and if we work this out we find the dose for two years is one-seventh of the adult dose. Like all rules, it has exceptions, for the undeveloped nervous system of the child cannot be relatively compared by any fixed denominator. However, we may lay it down as a law, with exceptions, of course, that drugs whose constitution is simple are well borne by children.

The female dose is rather less than the male dose. Women are often highly susceptible to the simplest bitters, but they stand purgatives and iron better than men. There is a racial peculiarity even in drug-taking. The Scot has not been nurtured in the lap of luxury, and heroics and superlatives extend to his drugging. Climate has an important effect on the action of drugs. In tropical countries quinine is prescribed in much larger doses than could be tolerated in cold or temperate regions, and ipecacuanha can be given in larger doses without causing nausea. Genuine individual peculiarity to small doses of certain drugs is so varied, so inexplicable, and so humorsome that it almost borders on the romantic, and a fascinating chapter might be written on the subject.

The speaker then referred to larger doses than those ordinarily prescribed, and suggested that the Pharmacopoeia Committee insert a paragraph in the preface asking prescribers to make distinctive marks when they intentionally order larger doses than those given in the Pharmacopoeia. Liquid extract of ergot, the dose of which is 10 to 30 minimis, is occasionally prescribed in 2-dr. or even 4-dr. doses. The solutions of arsenic are likewise often administered in doses far in excess of the 2 to 8 minimis, as much as 30 or 60 being prescribed in St. Vitus's dance in children. The 5 to 15 minimis of tincture of digitalis may, in alcoholism, mount up to 60 minimis. Ipecacuanha-root in powder is prescribed in tropical countries in 30-gr. or 60-gr. doses every hour for five or six doses in dysentery, and now and again one has to give such doses in this country to patients who have lived in the tropics. Dr. Gordon Sharp next spoke of dose calculations and the relative advantages of apothecaries' weights and the metric system. He said:

The metric system, being a decimal method, is easy of multiplication and division as compared with our clumsy system, but mistakes in dispensing are not unknown in Germany, which is the adopted home, if not the birthplace, of the metric system. The very clumsiness of the apothecaries' system may be a safeguard, because in making calculations one has always to be on the watch. Whether it is this or the superior intelligence of British pharmacists, it is pleasing to record that dispensing mistakes are few. After everything has been said against us as to our slowness and dulness in taking up and comprehending new methods, our most determined opponents will admit we are a practical people. If it had been evident to us that the adoption of the metric system was to be of material advantage in the actual practice of medicine and pharmacy we should ere now have been deep in the mysteries of the cubic centimetre. The American people are nothing if not up to date, and they do not enforce the metric system in the dispensing of prescriptions. The metric system is authorised by Act of Congress as it is amongst us by Act of Parliament. . . . There is something to be said for the old system, and seeing chemists not only know a system that has been practised so long in dispensing, but also know the system employed on the Continent, no one has any right to look upon British pharmacy as being old-fashioned in this respect.

Finally, reference was made to the doses given in the Pharmacopœias. The system adopted in the 1898 edition marked progress in the science and art of Pharmacopœia-making.

Improvements could be made, and have been suggested, but, on the whole, a bold attempt has been made at uniformity in dosage. This better system is no doubt due to the larger measure of representation which pharmacy has had in the compilation of the work. Pharmacy should be largely and directly represented on the Pharmacopoeia Committee, for the book concerns the pharmacist even more than it does the medical man. There are many medical practitioners who have not yet seen the inside of the 1898 Pharmacopœia, but Dr. Gordon Sharp questioned if there could be found one pharmacist of whom the same can be said.

Mr. DOTT said the paper of Dr. Sharp was an exceedingly interesting one. There was one point in which he did not quite follow what he said. That was in regard to the analogy between morphine and pepsin. He would expect morphine to be oxidised in the tissues, and could not see how it would be available for continuous use. With regard to Mr. Lyon's paper he agreed with most of what he said. He was not sure that much of what was done by the large manufacturers could be called pharmaceutical advancement. It was very doubtful if the tablet form was the best for the administration of many medicines. Many of the preparations sent into the market were rather to be classed as pseudo-scientific quackery. This was true even when they had what purported to be medical certificates.

Mr. HILL said the point that struck him most in Dr. Sharp's paper was that in which he advocated the teaching of what might be called the theory or science of dosage. He thought there was a great deal in that. Pharmacists were always kept back from doing much in that direction from a feeling that they might be trenching on the sphere of the prescriber. This feeling was due to the restriction imposed on their pharmaceutical examinations by the Pharmacy Act of 1852, which excluded therapeutics or anything implying the theory and practice of medicine. But they were required, as pharmacists, to know a good deal about dosage. They were examined on it. There had been great advances in the science of dosage since the passing of the Act of 1852. At that time it was to a large extent empirical; but now it was for the most part founded on a thoroughly scientific knowledge of the action of drugs. He thought it would be an immense advantage to pharmacists to have a knowledge of the scientific basis of dosage, and therefore the suggestion of Dr. Sharp was well worth consideration. Mr. Lyon had given them a large amount of very good and proper advice. Advice was sometimes cautious, but he hoped no feeling of that kind would prevent their getting the benefit that could be got from such a paper. For the most part his suggestions really embodied what had been the distinctive work of the Association for twenty-four years. That work had been in great measure successful, and had been recognised in reports to the General Medical Council, and embodied in the latest edition of the Pharmacopœia.

Mr. MACPHERSON and Mr. HUTCHEON also spoke, and Dr. SHARP and Mr. LYON replied.

Society of Chemical Industry.

NOTTINGHAM SECTION.

THE annual meeting of the above Section was held at the Victoria Station Hotel, Nottingham, on March 26, the Chairman (Mr. L Archbutt) presiding. The retiring officers were re-elected, and after other business, which included a vote of thanks to the Committee of University College for use of rooms in the College, Mr. G. J. WARD read a paper on

THE ROLE OF ALUMINA IN BLAST-FURNACE SLAGS

The paper very appropriately followed that of Mr. Rix (reported on page 374 of the C. & D., March 8), as slags and insoluble grits have much in common as regards their composition and physical properties. The author based his remarks on a series of analyses of nineteen specimens of slags which he exhibited, and which contained an abnormally high percentage of alumina. Two specimens contained over 40 per cent., the highest as much as 44.87 per cent. The author discussed the views of various investigators as to the occasionally acid or neutral character of alumina in these

substances, but he concluded that in these particular slags it is found as a base replacing an equivalent quantity of lime.

THE ANNUAL DINNER

was subsequently held, Mr. L. Archbutt being in the chair. Amongst the members present were Dr. F. Stanley Kipping, F.R.S., Messrs. J. B. Alliott, F. S. Barford, R. M. Cavan, B.Sc., S. R. Trotman, M.A., G. J. Ward, and J. T. Wood (Hon. Secretary). After the loyal toast had been honoured, Mr. F. J. R. CARULLA proposed "Success to the Nottingham Section," and said that the members of their Society, engaged as they were in the heavy-chemical industries, were called upon more than those of the sister chemical Societies to devise methods for the utilisation of waste products, which were still thrown away in huge quantities. To take the subject that they had heard about that evening, Mr. William Whitwell, in his presidential address to the Iron and Steel Institute in 1901, stated that the total make of slag in the Cleveland district was 2,670,000 tons yearly, of which only a comparatively small portion was utilised. Although they might not attain the success anticipated by the inventor quoted in Percy's "Iron and Steel" [Dr. Smith, page 517], whose figures would make a company-promoter's mouth water, yet much may still be done, and one can only hope that members of this Section will share in its accomplishment. The CHAIRMAN, in replying, said the Section, although mostly composed of analytical and manufacturing chemists, represented many other branches of chemical activity, including pharmacy.

Newcastle Chemists' Association.

A SPECIAL meeting of this Association was held at Newcastle-on-Tyne on Wednesday evening, March 26, to consider Mr. James Paterson's proposals respecting

STATE AID TO PHARMACY STUDENTS,

as brought forward by the Federation. Mr. Robert Wright (President) occupied the chair. Mr. T. MALTBY CLAGUE, in introducing the subject, considered that electrical engineering and other technically-aided industries handicapped the chemist, and that parents noted this in deciding what to put their boys to. They could qualify much more cheaply than the chemist, who had to depend entirely on his own resources for his education. He contended that as ratepayers they had a right to part of the money at the disposal of the Technical Education Committees of the local Councils. Government, he continued, compels qualification in the interests of the public, therefore they ought to give some assistance towards that qualification. He suggested this help might take the form of scholarships tenable at local schools, assistance in railway travelling, &c. He also suggested that, with a view to paving the way for approaching the Technical Education Committees, the North of England School of Pharmacy should be taken under the patronage of the local Association as at Liverpool, and that a visiting committee of, say, three be appointed to report upon the equipment of the school and the curriculum in force there.

Messrs. GILDERDALE, ELLIS (South Shields), F. R. DUDDERIDGE, G. F. MERSON, J. LOW (Chester-le-Street), BARRY NOBLE, DAKERS, jun., and others also spoke, and the following resolutions were submitted and passed unanimously :—

1. That this Association decides to approach the Technical Education Committees of the Northumberland County Council, the Durham C.C., and the Newcastle City Council, and urge upon them the desirability of giving grants in aid of students in pharmacy, by paying their fees, providing scholarships or prizes tenable at the school which the student may select.

2. That this Association appoint a small committee (say 3) to inspect the North of England School of Pharmacy with a view to reporting on its equipment, curriculum, &c., and as to the advisability of its being definitely placed under the patronage of the Association with a visiting committee.

Thereafter committees in accordance were appointed—that to approach the various technical education authorities being Messrs. Wright (President), Atkins (Secretary), Clague, and Merson.

Business Changes.

MR. D. T. EVANS, of Margate, is opening a pharmacy at the New Public Buildings, Birchington-on-Sea.

MR. H. DAVIES has taken over the business of the late Mr. J. L. Lewis, chemist and druggist, at Aberystwyth.

MESSRS. HORRELL & GOFF, chemists, Dartford, have taken over the pharmacy of Mr. Jas. Cann, at 8 Lowfield Street, Dartford. The business will be continued under the style of Messrs. J. Cann & Co.

A DISSOLUTION of partnership is announced between Peter Leuthardt and Stanley Goulden Thompson, aniline-dye and chemical manufacturers, Droylsden, trading as "Leuthardt & Co." The business will be continued alone by Mr. Thompson.

THE business of the late Mr. Thomas Christopher Fawcett, pharmaceutical chemist, the Whitworth Pharmacy, 413 Oxford Road, Manchester, has been taken over by Mr. John Layland, of the Mount, Wrightington, near Wigan, and formerly an assistant with Mr. Cave, chemist, Southport.

Trade Notes.

AN AUCTION OF PLANT suitable for manufacturing chemists is to take place at 175 Grange Road, Bermondsey, S.E., on April 16. Particulars will be found in our coloured supplement.

MODERN DEVELOPERS.—The *Actien-Gesellschaft für Anilin-Fabrikation*, whose agents are Messrs. Chas. Zimmermann & Co., 9 and 10 St. Mary-at-Hill, E.C., have issued a new edition of the booklet on modern photographic developers and "Agfa" specialities. Photographic chemists can obtain free supplies of the booklet for distribution on application.

A NEW CATALOGUE of proprietary medicines and druggists' sundries has been issued by Messrs. William Edwards & Son, 157 Queen Victoria Street, E.C. It is arranged in two parts. The first devoted to proprietary goods, is printed on white paper, whilst the second part, on tinted paper, deals with druggists' sundries. A new and useful feature has been introduced into the proprietary-medicines section in the printing of the names of protected articles in heavy type.

A CORONATION SOAP which will be hard to beat has been brought out this week by Messrs. Edward Cook & Co. (Limited), East London Soapworks, Bow, E. It is made with a white basis of tested purity, and is richly perfumed with a royal bouquet as delicate as it is natural. Each cake (there are three in a box) is done up in Coronation red paper with gold lettering, and the box is in Coronation red also, with medallion portraits of King Edward VII. and Queen Alexandra as a centrepiece on the lid. The soap "is made entirely, from start to finish, by English hands."

UNDER "Local Industries and Businesses" the *Rhyl News* prints as much as would fill a page of the *C. & D.* about Mr. P. J. Ashfield, chemist, High Street, Rhyl, and his business. Mr. Ashfield took over in 1897 one of the oldest businesses in the town, and since then he has made very great improvements in the business-premises, as well as in the class of trade carried on. Mr. Ashfield was trained with Mr. Claridge Druce, M.A., Ph.C., Oxford, and also acted as assistant to Mr. T. Porter Blunt, M.A., Ph.C., Shrewsbury, as well as to other chemists in Birmingham, Coventry, and London.

Births.

READ.—At 15 Hogarth Road, South Kensington, S.W., on April 1, the wife of Lawrence J. Read, London representative of Messrs. John Timpson & Co. (Limited), of a daughter.

THOMPSON.—At 3 Anglesea Road, Kingston-on-Thames, on March 26, the wife of Henry P. Thompson, of a daughter.

Marriage.

DICKENSON—HEMSLEY.—On March 31, at Bourne Abbey Church, by the Rev. H. M. Mansfield, assisted by the Rev. R. K. Paine, Edmund Ernest Dickenson, chemist and druggist, of Nottingham, to Mabel, eldest daughter of Mr. Wm. Hemsley, of Cawthorpe Hall, near Bourne, Lincs.

Deaths.

BELL.—At 65 Park Grove, Hull, on March 21, Mr. Henry Bell, chemist and druggist, formerly of Gosforth, Newcastle-on-Tyne. Aged 46.

BLAU.—At Hornsey, N., on March 31, Helen Jane E. N., the wife of Mr. Heinrich Blau, Secretary of the Medical, Surgical, and Hygienic Exhibitors' Association.

BURROWS.—At Wanlip, Syston, Leicester, on March 18, Mr. Hampden Charles Burrows, chemist and druggist. Aged 83.

CARRUTHERS.—At Gravesend, on March 24, Mr. Matthew Crowden Carruthers, chemist and druggist. Aged 26. Mr. Carruthers was a native of Buckie, N.B., and served his apprenticeship with Mr. John Webster, chemist and druggist, of that town. He commenced business in Gravesend about a year ago, and was only married last summer.

FORSTER.—At Norwich, on March 23, Mr. Arthur William Forster, chemist and druggist. Aged 41.

LEPPARD.—On March 21, at Kingston-on-Thames Mr. Jas. Leppard, formerly in business as a chemist at High Street, Chelmsford. Aged 59.

WAUGH.—At Falkirk, on March 21, Elizabeth Gillespie Hunter, widow of the late Mr. James Waugh, chemist and aerated-water manufacturer, Glasgow. Aged 77.

WILSON.—On March 28, Mr. George Ferguson Wilson, F.R.S., F.C.S., F.L.S., of Heatherbank, Weybridge, and Oakwood, Wisley. Aged 80. At this ripe old age has died a chemist who was little known to the present generation, although it was he more than any other man who was the means of making glycerin the popular article which it has become during the past forty years. He was the inventor of the process by which Price's glycerin is made, and for many years he was managing-director of Price's Patent Candle Company (Limited). Mr. Wilson was born at Wandsworth Common on March 25 1822. His father was Mr. William Wilson, of Kilbrough and Culter. He was educated at private schools at Wandsworth and Streatham. Afterwards he became devoted to chemistry, entered Price's, and spent much time in the study of fats, although when he started on the subject Chevreul's work was still recent, and glycerin was made by decomposing fats with litharge (as in making lead plaster), and treating the watery portion for the removal of lead and other impurities, and evaporating. Mr. Wilson's studies on fats culminated in 1854 with a patent taken out by himself and Mr. George Payne for the production of glycerin and fatty acids by treating fats in a specially constructed still with superheated steam. This was really a mechanical invention. In the same year Mr. Wilson communicated a paper to the Royal Society on the value of steam in the decomposition of neutral fatty bodies, and in the following year he described to the British Association at Glasgow his new method for obtaining and purifying glycerin. We may recall the fact that Mr. Michael Carteighe, while a student at London University College, was asked by Professor Thomas Graham to examine and report upon the first sample of pure glycerin which had come on the market. From this time Price's glycerin took the lead as a medicinal article. Mr. Wilson was elected a Fellow of the Chemical Society in 1855, and in the same year his researches brought him the blue ribbon of the science. He was a founder of the Institute of Chemistry. He retired from the management of Price's Patent Candle Company a dozen years ago, and devoted his leisure to gardening, in which he was an adept, lily-growing being his special hobby. He had served as a member of the Council of the Royal Horticultural Society, and had done much to promote the Society's interests.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B. Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

(From the "Trade-marks Journal," March 26, 1902.)

"SIDEROLEUM"; for chemicals. By the Siderosthen Paint Syndicate (Limited), Monier Road Works, Wick Lane, Bow, E. 244,268.

"DALO"; for photographic films. By G. Houghton & Son, 88 and 89 High Holborn, W.C. 244,458.

"PURITAN"; for chemicals. By Christopher Thomas & Brothers (Limited), Broad Plain Soap-works, Bristol. 243,012.

Device and the word "Witch" (the essential particulars); for a chemical chimney-cleaner. By Gourmet & Co., Mount Pleasant, W.C. 243,597.

"MATTHEINE"; for chemicals. By Matthey-Meier et Cie., 25 Steinevorstadt, Basle, Switzerland. 244,360.

"SYNOLINE"; for an embrocation. By Henry Shaw, 299 Harold Road, Clive Vale, Hastings. 243,673.

"PHORXAL"; for chemical and pharmaceutical preparations. By Julius Hofmeier, IV-I Hengasse 4, Vienna, Austria. 243,681.

"ZYMOCLIDE" (no claim for "Zymo"); for goods in Class 3. By Reed & Carnick, 42 Germania Avenue, Jersey City, U.S.A. 244,131.

"PEPTIRON"; for chemicals. By C. I. Hood & Co. (Limited), 34, Snow Hill, E.C. 244,158.

"LIFEWOOD"; for medicines. By William Payne, 2 High Street, Hitchin, Herts. 244,341.

"TEGMIN"; for chemicals. By Benno Rothziegel, 5 Rudolfsplatz, Vienna, I, Austria. 244,390.

"ATOXYL"; for pharmaceutical preparations. By the Vereinigte Werke Aktiengesellschaft, Salzute 16, Charlottenburg, Berlin, Germany. 244,633.

"COAGULINE"; for gelatine. By Kay Brothers (Limited), St. Petersgate Mills, Stockport. 244,179.

"THYMA"; for photographic developing-troughs. By Max Reichert, 11 Burgoynes Road, South Norwood, S.E. 243,160.

"VAROMA"; for surgical instruments and apparatus. By the Varoma Medical Company, Chatham, State of New Jersey, U.S.A. 244,073.

"HUMBINE"; for a dental-impression composition. By Daniel McLean Humby, 74 Oakfield Road, Stroud Green, N. 244,180.

"PELLOIDS"; for ink tablets or pellets. By Cochran & Co., Greenland Street, Liverpool. 244,094.

"AUROX" and "DALUX"; for photographic paper. By J. J. Griffin & Sons (Limited), 20-26 Sardinia Street, Lincoln's Inn Fields, W.C. 244,498 and 244,500.

Device of hedgehog; for food-stuffs. By the Lagos Stores (Limited), 6 Stanley Street, Liverpool. 241,912.

"VITAZ"; for a poultry, &c., spice. By R. Hyde & Co., (Limited), 4A Harold Street, Camberwell, S.E. 243,576.

"CIMEROZA," "NACONDA," "NALESTA," "ORDELTA," "ORLEDO," "STRALINO," and "VALASTRO"; for food-stuffs. By the Mazawattee Tea Company (Limited), Tower Hill, E.C. 244,423.

"ELEKTRIMEHL"; for a toilet powder. By Agnes Medhurst, Cottesmore Hall, Oakham. 243,453.

Device for a tooth-powder. By the Renson Manufacturing Company, 11 Woodbridge Street, E.C. 242,949.

Device of pine-apple; for perfumery and toilet-articles. By Joseph Crosfield & Sons (Limited), Bank Quay, Warrington. 244,393.

"ANCHOR"; for metal-polishes. By Edward James & Sons, Sutton Road, Plymouth. 243,791.

Device of huntsman and hounds and the words "Tally Ho!" (the essential particulars); for polishes, &c. By John Lane, 77 Tradescant Road, South Lambeth, S.W. 243,148.

"RICAN"; for boot-polishes and furniture-polishes. By F. W. Warmington & Co., 34 and 36 Bethnal Green Road, E. 244,098.

Practical Notes and Formulae.

SHAMPOOING-PASTE.

White Castile soap	...	...	14 oz.
Carbonate of potash	...	...	3½ oz.
Glycerin	...	...	7 oz.
Water	...	...	28 oz.
Oil of lavender	...	...	30 drops
Oil of bergamot	...	...	30 drops

Heat the soap, carbonate of potash, and water on a water-bath till a homogeneous mass results, then add the glycerin and perfume.

SUPPOSITORY-BASE.

M. ED. CROUZEL suggests the following basis for suppositories in lieu of cacao butter:—

Hard paraffin	...	...	1
Lanolin, anhydrous	...	...	3

The advantages claimed for the lanolin-paraffin base are greater ease in incorporating liquids owing to the fact that anhydrous lanoline absorbs its own weight of water and the easier absorbability of medicaments combined with lanolin.—*Répertoire de Pharmacie.*

BROMIDIA SUBSTITUTE.

THE following is a formula proposed by M. De Ruyter, a member of the Antwerp Society of Pharmacy:—

Potass. bromid.	...	...	3v. gr. viij.
Chloral hydratis	...	...	3v. gr. viij.
Ext. cannab. ind.	...	...	gr. iiij.
Ext. hyosyami	...	...	gr. iiij.
Aq. destill.	...	...	3j. mxxv.
Ext. glycyrrh. liq.	...	...	3j. mxxxv.
Alcohol (9 per cent.)	...	...	3j. mxxv.
Ol. aurantii	...	...	mijj.
Glycerini, q.s. ad	...	...	3j. iss.

Dissolve the bromide, the chloral and the extracts in the hot water, add the liquorice, alcohol, and glycerin, allow to stand for several days, and filter. The dose is one teaspoonful.

—*Journal de Pharmacie.*

SOAP DENTIFRICE.

Pumice powder	...	...	3iss.
Cuttle-fish powder	...	...	3iss.
Powdered myrrh	...	...	3ij.
Powdered orris-root	...	...	3jiss.
Precipitated chalk	...	...	5vj.
Powdered soap	...	...	3vij.
Glycerin	...	...	3xij.
Rose-water	...	...	q.s.
Oil of cloves	...	...	3jss.
Otto of rose	...	...	3j.

Heat the soap and glycerin together on a water-bath to obtain a uniform mass, add a little rose-water, the powders, and the perfumes, and beat in a mortar till a uniform mass results.

—*Plarm. Zeit.*

BOILING MILK.

SOME doubts having been expressed as to the advisability of boiling milk from a nutritive point of view, Dr. W. B. Ransom, Nottingham, has given attention to the matter in a paper before the Nottingham Medico-Chirurgical Society, in which his conclusions are thus summarised:—

There is no solid evidence to show that milk raised to its boiling-point (110° C. = 233° F.), or to the temperature of boiling water for ten minutes or a quarter of an hour, suffers any diminution of its nutritive qualities. Neither is it probable that, if consumed within twenty-four hours of the heating, it will cause infantile scurvy. The same is true of pasteurised milk heated to 80° or 85° C. None of these methods render the milk absolutely sterile, but they do kill most pathogenic microbes (for example, those of tuberculosis, cholera, diphtheria, and typhoid), and if the milk be kept cool and drunk within twelve hours of the heating, few or no spores will have developed into bacilli. Pasteurisation is probably less reliable than heating to 212° F. for ten minutes, and is also more difficult to carry out, as it is easy with simple domestic apparatus such as Aymard's, or other double saucepan, or Soxhlet's, or Hawksley's bottle-holding tins to keep the milk in a bath of boiling water for ten minutes.

Scientific Progress.

Genuine Lemon-juice.—Send'ner publishes the results of the examination of a number of samples of pure lemon juice, and gives the following as the limits he considers should be expected: sp. gr. at 15° C., 1.031 to 1.039; total solids between 8 and 10 per cent, of which at least 6, but usually more, up to 9 per cent, should consist of citric acid, and ash should not exceed 0.5 per cent.—(*Chem. Central.*)

Aloin Test.—M. Leger, before the March meeting of the Paris Society of Pharmacy, read a paper on aloes, in which he proposes to utilise the action of sodium binoxide on aloin in testing for aloes in pharmaceutical preparations. The substances which might lead to confusion, such as the soluble principles of rhubarb, cascara sagrada, and buckthorn, are precipitated either by alum or by subacetate of lead. M. Leger says that although aloes can be preserved for several years without alteration in pilular form, the aloin tends to disappear from the aloetic tinctures of the Codex. (*Journal de Ph. et de Chimie.*)

New Remedies.—*Ibite* is a compound of tannic acid and bismuth oxyiodide, which is claimed to be a powerful steriliser. It is a greenish powder, odourless and tasteless, and insoluble in most solvents. In contact with organic fluids it easily parts with a portion of its iodine, to which it probably owes its therapeutic value. *Hermophenyl* is a mercury-sodium phenol disulphonate, containing about 40 percent of mercury. It is a white amorphous powder, easily soluble in cold water. It is claimed to possess a very powerful antiseptic action, and is best applied in the form of a gauze. *Iodocol* is a mixture of iodine and guaiacol, suggested as a useful form of administration of guaiacol in cases of lung-tuberculosis. *Lactanin* is bismuth lacto-tannate, a yellow tasteless and odourless powder, insoluble in water, and recommended for chronic enteritis and diarrhoea. (—*Merck's Berichte.*)

Recent Wills.

GELDART.—Letters of administration to the personal estate of the late Mr. John Geldart, chemist and druggist, 163 Oakfield Road, Liverpool, who died intestate at the Royal Infirmary on November 8, 1901, have been granted to his widow, Mrs. Sarah Ann Geldart. The gross value of the estate was sworn at 4717. 3s. The sureties are Mr. W. D. B. Geldart, chemist's assistant, and Mr. C. H. Hutchence, 161 Queen's Road, Liverpool.

IRVINE.—The will of the late Mr. Robert Irvine, F.C.S., Royston, Granton, chemist to Messrs. A. B. Fleming & Co., ink-manufacturers, Granton, was recorded in Edinburgh on April 2. He has appointed as his trustees Professor G. Sims Woodhead, M.D., Cambridge; Dr. David Patrick, Edinburgh; Mr. David Jardine (manager of J. & G. Cox, Limited, Edinburgh); Mr. Robert McVittie, biscuit manufacturer, Edinburgh; Mr. Wm. Maxwell, journalist, London; and Mr. George M. Wood, S.S.C., Edinburgh. The preamble of the fifth purpose of the will is that in respect of his having become possessed of certain shares in the Christmas Island Phosphate Company (Limited), which he considers to be of great prospective value, he directs his trustees to do certain things. They are instructed, after setting aside 12,000/- for his relatives, to hold the remainder of his estate, including the shares referred to, till they shall accumulate to the sum of 25,000/-, or, in their discretion, to the sum of 30,000/-, which they shall then pay, exclusive of legacy duty and expenses, to the Association for the Better Endowment of the University of Edinburgh, for the purpose of founding a Professorship of Bacteriology in the University, and the equipment of a class-room and laboratory for the teaching of the same, and for conducting original investigation in connection with the said subject. He suggested that nominal fees only be charged for attending the lectures and laboratories. The residue of his estate he directs his trustees to pay to the Royal Infirmary of Edinburgh, the Royal Association for Incurables, Edinburgh, and the Dunlop Cancer Fund, in the proportion of one-third to each.

PAFFARD.—The will of Mr. Frank Paffard, Grantham, formerly a chemist and druggist of 57 Alma Street, Blackburn, who died on November 19, has been proved at the Lancaster District Registry by his daughter, Miss Emily Paffard, spinster, and Mr. Thomas Sharples, 62 Regent Street, Blackburn. The gross estate is valued at 5,717. 15s. 9d., and the net personality 3,811. 10s. 3d.

RUSSELL.—Probate of the will of Mr. Charles James Lawrence Russell, pharmaceutical chemist, Upton Dene, 56 Coombe Road, Croydon, who died on December 29, has been granted to the Rev. Charles Walter Russell, of St. Stephen's Vicarage, Battersea, one of the executors. The gross estate is valued at 700. 17s. 9d., and net personality 648l. 15s. 9d.

Things that Happen—Sometimes.



The Retort Ambiguous.

Th' invasion of th' adventurous Fair
To regions where man reigned supreme
Hath weighted him with double care
And shattered many a life long dream.
With man the Master's spoken word
Suffices, for he dare not gird.

But Daphne when the Minor's won
Bethinks herself no tinsel worth,
And thus when at life's work beginn'd
She fears no Minor lord on earth;
To Major e'en, when he perpends,
She pertly her opinion lends.

The wisdom culled from countless years
Behind the lone dispensing screen
Is naught; for Daphne laughs at fears,
And moves her own sweet way serene;
And most men know the dull despair
Of argument with Daphne fair.

But this man bolder, or less wise,
Bethought our Daphne to instruct,
And, heedless of her haughty eyes,
He meant to tender usufruct
Of what he'd dug from many mines
And garnered, when at Bloomsb'y's shrines..

"Think you," said he, "that without me
You will be able to dispense?"
'Tis Reynolds tells the tale, and he
Says Daphne made no vain pretence,
But, with a gleam in eyes so blue,
Replied, "I can dispense with you."

New Books.

Bocquillon-Limousin, H. *Formulaire des Médicaments Nouveaux pour 1902.* 5½ x 4. 3f. (Bailière et Fils, 19 rue Haute-feuille, Paris.) [Contains particulars of the following new remedies, amongst others:—Agurine, amyle (salicylate and valerianate), apocademe (chlorhydrate), azimol, bismytoze, calaya, calcinol, camphorates of creosote, guaiacol, and pyramidon, chiro, chloralothiforme, currine, dymal, eosolate of quinine, eupyrine forteine, gabianol, glycosolvil, hermophenyl, ichthargane, ichto-forme, iodolene, iodopyrine, lecithine, lygosine, lysiforme, o-tol, sanatogene, sapodermine, sapolane, sidonal, tannate of creosote, tannocreosiforme, thiopyrine, triferrine, tyratol yohimbine, and zomol.]

Cordingley, W. G. *A Dictionary of Abbreviations and Contractions Commonly used in General Mercantile Transactions.* 1s. net. (E. Wilson.)

Rhead, E. L., and Sexton, A. H. *Assaying and Metallurgical Analysis.* 9 x 5½. Pp. 442. 10s. 6d. net. (Longmans.)

Observations and Reflections.

By XRAYSER.

The Use of the Royal Arms

by tradesmen as an advertisement, or on their labels as an ornament, has been discussed several times lately, and will be more so as the Coronation approaches; and though it is a fact that certain officials have disclaimed any desire to harass traders who have used the picture with no intention to convey a false impression, their amiability cannot modify the precise terms of a statute. The Act says that if we are not among the blissful set specially appointed to purvey something to his or her Majesty, we are liable to a penalty of 5*l*. if we use the device [in a way calculated to deceive], and except for the pleasure of doing what we are told not to do, there can be but very little advantage in employing it. I happen to remember the reason why the section interdicting the use of the Royal Arms was introduced into the Patents Act, and it is perhaps worth noting. Before the Act was passed there were a number of offices in and about Chancery Lane boldly designated "Patent Office" and ornamented with an imposing copy of the Royal Arms. It was alleged that a great many inventors were consequently attracted into these offices in the belief that they were in the real Government office, and that they were not undeviated with due diligence. It was to protect people from this kind of error that the legal offence was created.

The Vaseline Trade-mark Case

will probably go to the House of Lords for final settlement, and I understand that comments on it at its present stage which might influence or intimidate the Supreme Court must be avoided. But for the benefit of future litigants, and without intimating any opinion on the merits of this particular contest, it cannot be contempt of Court to try to fathom the mysterious methods by which the Court of Appeal feels its way to a decision. The pivot on which the three Judges hung their arguments, it will be seen, was not at all whether the Chesebrough Company had or had not a just claim to the word. This consideration scarcely came within their survey. "The word vaseline was admittedly invented by R. A. Chesebrough," said Lord Justice Stirling quite incidentally, and as if that circumstance were an immaterial one. No; the question which the Court of Appeal decided by a two to one vote was whether the mark which was registered in 1877 was then properly registered as an old mark; that is, whether it had been used as a trade-mark in this country prior to 1875. And to get at that result they had to decide whether the onus of proof lay with the inventors of the word or with the challengers. The majority of the Court held that it was for the latter to prove the negative, and as they had not done so the property was left with the creators of it.

Inventors

of either words or things are not too generously treated in our courts. It might have been supposed that it was not an offence to invent something new or useful; but it is settled law that if a person does this he is punished by a certain outlawry so far as the Trade-mark Act can punish him. The linoleum case, quoted by Lord Justice Stirling, established that if a person invents and patents a process for manufacturing something, and sells that something by a certain name during the continuance of the patent, he loses his exclusive right to the name as well as to the process when the patent expires. This doctrine was imported from America. It first grew up when the sewing-machine patents

began to fall out. Mr. Singer, for instance, patented a particular form of sewing-machine, and when the patent expired someone else began to make the same machine, as of course he had a right to do; but he also claimed the right to sell it as Singer's. This claim was upheld by the Courts on the ground that otherwise the patent-monopoly would be in fact retained. So in the linoleum case, Mr. Justice Fry said this stuff is known only as linoleum. By what other name could another manufacturer sell it? He would have to invent a new name. Why should he not?

The Influenza-label

which formed the *casus belli* in the medicine-stamp prosecution at Brentford last week was of particular interest because it raised the question whether distinctive titles for medicines which include the name of a complaint (cough-mixture, for example) can be used without rendering the stuff liable by right or by grace. The Board of Inland Revenue has always assumed an air of generosity in connection with those titles, and in the case reported their representative argued that the use of the words "cough mixture" was, in fact, a holding-out of the medicine as beneficial for a cough. So general is this view that, as shown last week, Mr. Atkinson endorsed it without a doubt. If the Board accepts the Brentford decision, or if it should be confirmed on appeal, Messieurs the Commissioners will have to depend on some other virtues for their canonisation, now that this one of generosity breaks down. So far as the English language can be trusted, the term "cough-mixture" may just as well mean a mixture that will produce a cough as one that will cure one; and the Brentford Magistrates seem to have exercised a proper discretion when they declined to read into a designation an unexpressed meaning.

Vaccination by Chemists

which a correspondent of a medical journal declares to be frequent, is a new idea to me. But it looks like a rather hopeful side-line in localities where there is nothing to be got from the doctors. The art of vaccinating is certainly not difficult to acquire. A ten-minutes' curriculum would, I should think, perfect anybody in it. But what particularly occurs to me in connection with the suggestion is to commend it to the anti-vaccinationists. If they can induce chemists to take it up, coroners' inquests on children who have died after vaccination, medical evidence as to its danger, and verdicts condemning it, would soon be as plentiful as blackberries. There would not be a swollen arm which was not due to the carelessness or ignorance of the unqualified vaccinator, and thus by this Machiavellian policy public distrust and professional doubt would be sown simultaneously.

Petitions to Parliament

do not usually secure the prominent attention which for special reasons was paid to the one which Sir Herbert Maxwell presented on behalf of the horticulturist tradesmen who want to sell poisons. Constitutional manuals tell us that the right to petition Parliament is one of the most precious privileges which the subject enjoys. Anyone who has seen members pitching them into bags by the score will doubt whether the privilege is anything more than a sentimental one. Sir Herbert Maxwell's confessed indifference to the prayer of the petition so trustingly confided to him was evidence of the general feeling of M.P.'s in reference to these documents. Some 30,000 petitions are presented to the two Houses every year, and not half a dozen attract any real attention. There is, it is true, a Committee which reports on them periodically, but the only thing proved if there are 100 petitions in support of a Bill and 101 against it, is that there is a difference of opinion in regard to the proposal. Letters to members of Parliament direct from their constituents are infinitely more effective.

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Editorial Comments.

Jamaica Honey.

AT a time when every effort is being made to improve the position of the West Indies by reviving the ancient sugar-industry, it is appropriate to call attention to a scheme which is on foot to place the production of Jamaica honey on a more successful and remunerative footing. Mr. Dickson of the Jamaica Bee-keepers' Association has recently arrived at Bristol, and has brought with him samples of honey to place before buyers in the United Kingdom, the idea being to deal as directly as possible with consumers, and so save intermediate profits, which at present fall to the broker, merchant, and wholesaler. Hitherto the market-price has been governed by the law of supply and demand at public auction, and so far as the public are concerned Jamaica

honey is practically an unknown article, as it is not suited for table-purposes. It is all consumed in manufacturing processes, and it is difficult to understand, therefore, what Mr. Dickson is to do in order to get better values for Jamaica honey. It has been one of the cheapest articles sold in Mincing Lane during the past twelve months. At each successive auction since April, 1901 (when the new crop arrived), large quantities have been offered, and, although there has been a good demand throughout, prices have been the lowest on record, owing to over-production. Last year the shipments of honey to the United Kingdom were estimated roughly at 13,000 cwt., and we understand this quantity will be greatly exceeded during the coming season, as already some 5,000 packages of 25 gals. each are booked, so that the prospect of better prices for the farmer is not bright. Apiculture is one of the oldest industries in Jamaica, but owing to various reasons no great measure of success has attended the efforts of those interested in the business. The greatest drawback appears to have been uncertainty in the quality of the honey and the method of packing, but the Jamaica Bee-keepers' Association now claims to have effectively overcome these difficulties. The Association was formed for the mutual protection of buyer and seller, and the object is the guaranteeing of every package of honey shipped by it to be absolutely pure and of standard quality. A board of examiners has been appointed, composed of practical apiarists, and every package of honey sent by members of the Association for shipment is to be graded by these experts on its merits, and if found to come up to the required standard it is to be branded with the Association's stamp. The Association includes practically all the bee-keepers of Jamaica, numbering over 400, and these represent something like 5,000 colonies of bees. The beekeepers have hitherto been working at a disadvantage, having been compelled in many cases to mortgage their honey before production, and thus to accept prices below what they might obtain if they were better off. The Imperial Department of Agriculture in the West Indies has recently taken an active part in bringing bee-keeping under the notice of the people of the Lesser Antilles. They have engaged an expert, Mr. W. K. Morrison, formerly connected with the United States Department of Agriculture, who has visited Barbados, Dominica, Montserrat, Antigua, Grenada, St. Vincent, and St. Lucia. During his visits he has advised and assisted the bee-keepers to obtain honey of high quality. His opinion is that the outlook for bee-keeping in the West Indies is very encouraging, as there is an abundance of honey-bearing flowers all the year round. Mr. Morrison's work appears to have aroused much interest, and every effort is now to be made to encourage the industry by establishing model apiaries, granting assistance in obtaining hives, bees, &c., at cost-price, and obtaining practical information. Of course, the result will largely depend on the care and attention which bee-keepers are prepared to give the subject. It need hardly be said that Jamaica honey is as highly esteemed as any of the imported honeys on this market, and it is undoubtedly true that the prices obtained for it have been largely governed by the need of the bee-keepers to realise as quickly as possible. If Mr. Dickson wishes to secure the intermediate profits which accrue in the present method of placing the honey as quickly as possible in the hands of consumers—i.e., wholesalers and manufacturers—he must be prepared to sacrifice the superlative advantage of prompt cash, for he can only get that by the Mincing Lane methods of business or by giving buyers such inducements in quality and price as will compensate them for the existing familiar methods of doing

business. It appears to us that West Indian bee-keepers would do better if they would not disturb their existing connection at all, but keep up the supplies as hitherto, and also place on the market through wholesalers and retailers exclusively the best selected honey as table-honey in the comb or in glass jars. There may be more money in that, and if experience were to prove it, the new departure could be pushed without jeopardising the existing trade.

Doctors and Dentists.

The new editions of the Medical and Dental Registers, which are published this week (Spottiswoode, 6s. and 4s.), are good indices of the progress of the medical and dental professions in this country. The total number of practitioners on the Medical Register is now 36,912, or 557 more than on the last one. The number added by registration in 1901 was 1,318, or 27 less than the previous year, but still much above the average of the last five years (1,291). The removals have been fewer than the average, but the quinquennial revision under Section 14 of the Medical Act, which is performed more rigorously than the annual one, may be expected either in 1903 or 1904, and it will lop off many names now standing. The true index of the numerical progress of the profession is probably found in the number of registrations, which, although but slightly under the number in 1900, is far below the record year (1893), when 1,579 names were added. This is partly owing to the five-year curriculum weeding out undesirables, but chiefly to the fact that the medical profession is not so attractive as it was; people are realising that it is not the "very fine thing" it was supposed to be, and it is about the most expensive in preliminaries of any profession. The proportion of registrations in England, Scotland, and Ireland is much the same as in the previous year. In Scotland the number was identical (499), in England 4 fewer (672), but in Ireland 23 fewer (147). It is interesting to note that the Registers of pharmaceutical chemists and chemists and druggists for the United Kingdom contain 14,834 names, or nearly one-third the number on the Medical Register. The additions to the Pharmacy Registers in 1901, as the result of passing the Qualifying examinations, were 557, against 1,318 added to the Medical Register from the same cause. Of course, a larger proportion of medical registrants are colonial men, and many home students go abroad—more in proportion, we should think, than is the case with registered chemists and druggists.

The Dentists' Register for 1902 contains 4,641 names, against 4,509 in 1901. The latter year is not a good one for comparison, however, as the 1898 Register contained 4,937 names. The feature of interest to pharmacists in the Dentists' Register is the proportion that licentiates bear to the whole, or, in other words, the gradual extinction of the persons who on their own declaration were in *bonâ-fide* practice of dentistry on July 22, 1878 (the date of the passing of the Dentists Act). In 1897 there were 3,287 (or 67·63 per cent.) such persons on the Register; the new Register shows 2,587 names, or a proportion of 55·76. From this it can be estimated that by 1930 the persons registered as in practice in 1878 should have disappeared, but our successors in 1950 may find a few ante-Act names then on the Register, as some were under 13 when registered. The extinction of the non-licentiate class of dentists is regrettable from some points of view, as it is questionable whether the number of licentiates will suffice for the demand. What will probably happen is that more people will be compelled to resort to hospital's for dental treatment,

as it is certain that the working classes cannot afford to pay the fees charged by licentiates in dentistry. We do not lose sight of the fact that it is not necessary to be registered in order to practise on the teeth, but it is common knowledge that the younger generation of chemists do not now take up dental work to anything like the extent the ante-Act chemists did, and it is this class which has provided a large part of the modern and cheap dentistry.

Women in Pharmacy.

THE *Pharmaceutische Zeitung* publishes some interesting facts on the employment of women in continental pharmacy, stating that although women have had to fight hard for admission to the universities, and in some cases still have to do so, the pharmaceutical career is nearly everywhere thrown open to them through the initiative of men. Naturally this is not from any chivalrous wish to accede women a right, but from the scarcity of male assistants. Hermann Schleuz, a decided opposer of the emancipation of women, found during his pharmaceutical researches so many references to their employment in the early centuries that he thought it worth while to collect these data, and to publish them under the title of "Women in the Realm of Esculapius." Schlenz arrived at the conclusion that women are not as suited for the calling as is generally supposed, and that their work is inferior to that of men. Practice, however, contradicts this theoretical conclusion, women pharmacists now being employed almost everywhere. At the present time there are over four hundred women-pharmacists in Russia. Mrs. B. Le-niowska, who a short time ago was the first to obtain permission to open a pharmacy there, has in her pharmacy at Moscow a staff which is, with one exception, entirely composed of women, no man alone being employed for the convenience of customers who prefer to be served by a man. The happy land for women-pharmacists appears, however, to be Holland, where the total number of assistants comprises 840 women and 435 men. In most of the Dutch pharmacies women and men assistants are found employed together. There are five women and three men at the pharmacy of the large Amsterdam hospital. Women have more favourable hours of employment than their male colleagues, as they have no night-duty. In Germany, pharmacy has been thrown open to women since 1899. The scarcity of assistants, and the impossibility of paying qualified ones in small country pharmacies, caused a commission, which had been appointed by the German Pharmaceutical Society, to inquire into the matter. In reply to a circular, 2,066 answers were received, of which 1,392 were in favour of women. The Commission therefore proposed, among other remedies for solving the assistant-difficulty, that women should be accepted as pupils in small pharmacies, and trained as assistants without admittance to the State examination, and that the female members of a family should be employed on the responsibility of the owner, in quite small pharmacies not able to afford paid assistants. These proposals were rejected by the Society, and, in spite of women being now officially admitted to German pharmacy, very few have availed themselves of the privilege. In Hungary, where women have since 1893 been allowed to enter the pharmaceutical career there are also few who have taken advantage of the permission. The conditions of entrance are the same for both sexes, except that the women have to apply for sanction to the Minister of Education. This is, however, purely a matter of form, as the permission is always given. The scarcity of assistants in Hungary is so great that every opportunity is taken to boom the calling in the daily Press in order to prevail upon more women to join it.

It is described as one of the most remunerative of callings, which is by no means the actual case, as the male assistants, even after a long term of service, do not obtain a higher salary than 300*l.* per month, which, considering the training necessary and the responsibility attached to the position, cannot be considered high. There are at present three women employed in pharmacies in Hungary. There are few women-pharmacists in Switzerland, although they would be gladly welcomed. The Roumanian pharmacists are not so much in favour of the invasion of women, and engage but few. Those employed are mostly at the hospital at Buda Pesth. Austrian pharmacists strongly opposed the entrance of women into their ranks, and maintained that if they were admitted the profession would lose in repute and social position. In spite of opposition, however, women obtained the necessary permission in 1900, and some are now actually employed by unprejudiced pharmacists. What most strikes us in reading the article is the universal scarcity of qualified pharmaceutical assistants. This country is bad enough. Since the Boer war broke out thousands of young men have been drafted from productive to destructive means of employment, and, as a consequence, younger lads have been taken on at comparatively high wages for work previously done by those out of their teens. The result is that errand-boys and apprentices are difficult to get in every branch of trade. This condition may right itself in time but the scarcity of chemists' assistants is another matter, and it almost seems from its universality that there is something in pharmacy repellent to present-day youths.

THE MARTINDALE MEMORIAL.

It will be noticed from a cablegram on page 521 that the Cape Pharmaceutical Society has resolved to contribute to the Martindale Memorial. This is the first colonial response, and others will doubtless follow. We think the committee are keeping the matter rather quiet. Things of this kind are apt to become failures if they are not kept well under the notice of those who may subscribe. Nothing official has been heard of the memorial since the meeting a month ago. The committee are aware that the hospitality of the columns of the trade-journals is extended to them.

NEW CATARACT-CURE.

The eradication of cataract by means of the knife is now so common and successful an operation that other cures for it are rather at a discount. Nevertheless, Dr. Bahal, of Bordeaux, has come forward with the suggestion that a 2½-per-cent. solution of potassium iodide (or the sodium salt), used as a bath twice daily, clears up arterio-sclerous cataracts. The Paris edition of the *New York Herald*—a copy of which comes to us from a faithful admirer of the C. & D. at Nice—devotes a column to the treatment, first telling all about the scissors, forceps and knives that take part in the surgical treatment. Besides bathing the eye in the iodide-solution twice daily, "one or two drops" of it are instilled into the eye morning and evening. The treatment is worth trying in early cases, for if it does no good it will do no harm.

ARSENIC IN REDUCED IRON.

Dr. E. S. Reynolds, of Manchester, in his evidence before the Royal Commission on arsenical poisoning, drew attention to the large quantity of arsenic sometimes present in reduced iron—B.P. ferrum redactum in some cases having been found to contain as much as 1 per cent. of arsenic. Many practitioners have found special advantage from administering iron in this form in cases of anaemia, and it is possible that this beneficial result arises from the fact that with every grain of reduced iron a dose equivalent to a minim of liquor arsenicalis is administered. The possibility

at any rate, deserves to be noted; but we may recall the fact that Mr. E. S. Peck found only three out of sixteen commercial samples to be absolutely free from arsenic (see *C. & D.*, August 3, 1901, page 242).

A WORD TO PROPRIETARY-PACKERS.

Manufacturers and wholesale houses connected with the drug-trade are, as a rule, careful not to pack goods to be distributed to the public with printed matter intended for the retailer only. But there are exceptions. A subscriber sends us this week the sheet of a wholesale price-list which was used as packing of a proprietary article. It contained such items as the following:—

	Per doz net.			
	s.	d.	s.	d.
Crown Perfumery Co.'s invigorating lavender salts	1	6	12	0
Diamond frost...	0	1	0	6
Dinneford's Army bath-pads	2	0	10	6
Eyebrow pencils	0	3	1	6
Gibbs's superfatted cold-cream soap	0	6	3	9

Such items could be multiplied by the score. This sort of thing is very poor business on the part of the packers. It is false economy, and, besides giving the public information which belongs to the retailer, it cannot fail to alienate the retailer's affection, if any, for the proprietaries.

"DELIGHTFULLY SOOTHING."

The Commissioners of Inland Revenue are to take the opinion of the High Court on the Brentford Magistrate's decision in the Stamp Act case reported last week. Mr. Denniss applied to the Magistrates on Thursday, March 27, asking them to state a case. The Magistrates felt reluctant, chiefly because they did not wish Mr. Sanguineti to be put to further expense in the matter, and they asked Mr. Denniss to give an undertaking to that effect before they state a case. This, we understand, he is prepared to do, and the matter will therefore come under revision by the High Court Judges. The Chemists' Defence Association (Limited) defended at Brentford last week, and there, we understand, the Association's liability ends, a court of first instance being all that it professes to cover. But in so important a matter as this, wherein the revision is of benefit to the whole trade, some effort should be made to have the case for the defence stated by an able lawyer. We wait some declaration by the Chemists' Defence Association on the matter.

SECOND THOUGHTS ARE BEST.

So it is said, and it is true as regards the appeal by Mr. Dobbs, the solicitor for the defendants in the recent case at Newcastle-under-Lyme regarding the sale of "XL-All" insecticide. It will be remembered that the Magistrates agreed to state a case, but at the Newcastle-under-Lyme Police Court last week it was stated that it had been decided to abandon the appeal. The Bench consented to the withdrawal of the appeal, and ordered the recognisances of Messrs. M. & E. Jenkinson, who sold the insecticide, to be vacated. It was certainly a bold step to appeal in a case of non-labelling which followed the death of a man through the omission, and, as we pointed out a fortnight ago, the appeal was opposed to the principle advocated by Mr. Dobbs's Society. Now that the case is settled the fact may be brought to light that the defendants were not summoned under Section 15 as illegal sellers of the poison, and we presume that the Pharmaceutical Council, for some reason known to themselves, refrained from prosecuting under that section.

SMALLPOX DISINFECTION.

The recent report of experts to the London County Council regarding the activity of antiseptics and disinfectants has given one or two people the opportunity of exercising the gentle art of punctuation. A correspondent of the *Daily*

News, for example, writes in a spirit of astonishment, asking why the wonderful efficacy of formalin has not been brought to public notice before. This correspondent succeeds in reiterating the good qualities of formalin. His innocence is sufficiently transparent, but he is rivalled by Mr. James Haysman, of the International College Hampstead, who in the *Pall Mall Gazette* points out that burning sulphur is little good (the *Daily News* man has the same idea): chlorine is the thing. "Well do I remember," says Mr. Haysman, "my old friend Dr. Cooper's exultation when he so promptly checked the spread of scarlet fever in one of the most densely populated districts of Bristol by, as he described it, 'the greatest stink he had ever made, emanating from chloride of lime and dilute sulphuric acid.'" The moral of the whole thing is, we are to understand, there would have been no smallpox epidemic if everybody had been as wise as these authorities.

A NARROW MARGIN.

The general medical practitioner in England is, when he gets into the swing of family-practice, one of the hardest-worked men on earth, and not well paid either. A middle-class practice returning 500*l.* a year keeps a man going all day and allows him few holidays. Lower down he has to work as long for less, and when there is club-practice he is in eminent risk of making nothing at all if he has to throw in bottles along with medicine. So the *Hospital* tells us in the following plaintive sentences:—

Nothing could more markedly show the depths to which contract-practice has dragged noble profession than the interest roused by the "bottles" question when club-practice is discussed. It seems that certain club doctors, although perfectly ready to give "attendance and medicine" according to their contracts, draw the line at bottles. Rallying to the battle-cry, "No bottles," they defy the clubs, and hold that each club patient must provide himself with that necessary receptacle for his physic. The whole squabble is inexpressibly ignominious, and the pity of it is that the difficulty seems to be a real one; for to such a miserable remuneration has contract-practice been cut down that the question of "bottles or no bottles" involves a serious proportion of such profits as the medical man derives from it. . . . If the payments are cut so fine that the question of bottles becomes one of serious importance, it is difficult to have much confidence in the "attendance and medicine" which are provided.

Club-practice has its evils, chiefly of a lowering-the-profession order, but we cannot repress a dash of sympathy with the men who have to do it.

THE ABUSE OF PRESCRIPTIONS.

The recent case of *Forsythe v. Law* has given the *Hospital* the text for some remarks on the abuse of prescriptions. It is the old story of repeats without the prescriber's sanction on each occasion, and our contemporary remarks that

anyone armed with a prescription can obtain practically as much of the drug ordered as he wishes, and it therefore is a serious question whether some restriction should not be put upon the dispensing of strong narcotics and other substances which ought only to be taken under the immediate direction and superintendence of a physician. Perhaps when the Pharmacy Acts are revised it would be possible to insert a clause compelling chemists to stamp upon the prescription the date when dispensed, so that others could see at a glance the amount recently supplied, or a clause forbidding the making-up of mixtures containing poisons without special instructions.

We question the first statement, and see no reason for legislation to prevent repeats, which can be done by the prescriber stating on his prescription that the medicine is not to be repeated. Few, if any, chemists would ignore such directions.

DUTY-FREE ALCOHOL.

On several occasions during the past few years we have referred to the question of the use of duty-free pure alcohol in chemical-manufactures in this country, and it may be remembered that at the meeting of the British Association in Glasgow last year the Chemical Section had a discussion

on the subject. The Council of the Society of Chemical Industry now intimates that, the question of concessions in regard to the use of spirit having become pressing, it desires to obtain information from members interested in industries in which partially or wholly duty-free spirit would be of advantage. Communications should be sent to the Secretary of the Society, Palace Chambers, 9 Bridge Street, Westminster, London, S.W. This is a matter in which manufacturers of pharmaceutical products are directly interested, and we print this notification in order that they may take the necessary steps to have their case considered in any proposals that are made to the revenue authorities.

MALARIA-CURES.

In a recently issued Foreign Office Report, Mr. Neville Rolfe, British Consul at Naples, writes about mosquitos and malaria, stating that the insects are not transported by wind, but move from place to place on or about men or animals, and on baggage. Cases of fever, owing to this cause, occurred at the station of Termini, near Rome, the cases having probably originated from the mosquitos conveyed by the Terracina train, which crosses the most deadly part of the Pontine marshes. Mr. Rolfe has something to say about cures—*e.g.*, that there is a special aniline dye which, when diluted even to the extent of 0·00031 per thousand, is said to kill the larva. He also mentions that *Pyrethrum roseum* cultivation is being tried near Ceprano, a town about half-way between Naples and Rome, and that powdered valerian-root mixed with insect-powder renders it more efficacious. Experiments were made last summer by Professor Grassi to combat the malady by the use of drugs. Having selected one of the most malarious places in Italy—Ostia, at the mouth of the Tiber—he and his staff administered six pills a day to adults, and a proportionate dose to children, the pills being composed of a compound called "esanofele," a harmless drug composed of quinine, arsenic, iron, and bitter herbs. Dr. Grassi speaks highly of the results, and the tabulated statistics of the Ostia treatment appear very favourable. This is a nice little advertisement for "esanofele," which, we gather, is "a very expensive drug." One wonders, nevertheless, why the Foreign Office goes to the expense of putting such things in Blue-books.

Gazette.

Partnerships Dissolved.

- Cohen, G. A., and Morgan, H. B. T.**, under the style of Cohen & Morgan, Harringay, Middlesex, surgeons.
- Leuthardt, P., and Thompson, S. G.**, under the style of Leuthardt & Co., Droylesden, Lancs, aniline-dye and chemical manufacturers.
- Major, H. P., and Dickson, W.**, under the style of Messrs. Major & Dickson, Hungerford, Berkshire, general practitioners.
- Roper, A., and Huntley, E.**, under the style of Dr. Arthur Roper, Dr. Edgar Huntley, Lewisham, S.E., physicians, surgeons, and general medical practitioners.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATION.

- Kennedy, Angus Ross**, Coventry, Warwickshire, late Bilston, Staffordshire, physician and surgeon.

A SINGAPORE SUBSCRIBER, writing on January 10, 1902, says, in renewing his subscription:—"It is the best investment I know of on this side of London, and the amount of information and tips it contains from week to week, it strikes me as really wonderful how you can do it at the money, and give away a DIARY as well—a volume in itself.

Legal Reports.

Stamp Act, 1812.

"DELIGHTFULLY SOOTHING": APPEAL.

At the Brentford Town Hall on Thursday, March 27, Mr. Dennis asked if the Bench would state a case for the High Court in the case against Mr. F. Sanguinetti (reported in last week's *C. & D.*).

The Chairman said he thought it might be waste of money and time.

Mr. Dennis said it was a matter of great importance.

The Chairman said the Bench had been of opinion that the mere putting of the words "delightfully soothing to singers and public speakers" on the box was not a recommendation of the pastilles.

Mr. Dennis said his appeal would be, of course, on a point of law.

The Chairman said it seemed very trivial to fall on a respectable chemist as they had. Would the parties undertake the costs of the case, so that Mr. Sanguinetti would not be put to further expense? The majority of the Magistrates thought it was a frivolous appeal. They could, of course, go for a mandamus.

Mr. Dennis said the question of costs would be for the High Court.

The Bench allowed Mr. Dennis to have his case stated on the condition mentioned, and asked him to give it his early attention.

Sale of Food and Drugs Acts.

MILK OF SULPHUR.

At Dunkinfield, on March 27, Allen Saxon, drug-dealer, of Oxford Road, Dunkinfield, was fined 5s. 6d., and costs, for selling milk of sulphur which was stated to be adulterated with 45 per cent. of mineral matter. The defendant said when he purchased the drug from Mr. S. Sharp, chemist and druggist, Stamford Street, Ashton-under-Lyne, in 1898, he was told that it was perfectly pure. There was no B.P. standard in 1898 for the drug, he added. Inspector Lee stated that milk of sulphur would not depreciate to such an extent in 1,000 years.

SOAP-LINIMENT.

At Bow Street Police Court on April 1, judgment was given in the adjourned case in which Arthur Spinks, trading as a chemist, Theobald's Road, W.C., was charged with selling soap-liniment containing 40 per cent. of methylated spirit (see *C. & D.*, February 22, page 293, and March 8, page 380).

Mr. Marsham, in giving his decision, said the case was not without difficulties, but on the facts before him he found that soap-liniment was a drug, and the formula was in the Pharmacopoeia. It was admitted that soap-liniment made with methylated spirit is an article of commerce, the evidence given by two doctors and six chemists not being contradicted, showing that when the article was made with methylated spirit it was equal as to strength and efficiency to that made with rectified spirit. Chemists' price-lists specified two kinds, and the methylated liniment was largely sold as a domestic remedy, and was, therefore, an article of commerce. He had no doubt, however, that the proper course for a chemist to adopt would be to ask the customer whether he wished to purchase the article compounded with rectified or methylated spirit, the difference in the cost being about one-half. After considering all the circumstances he had decided to dismiss the summons.

Mr. Walford (who supported the summons) asked for costs, but Mr. Marsham said he did not think he could give costs to either party; Mr. Beck interposing that he had no intention of applying for costs.

Mr. H. C. Jones (the Town Clerk for Holborn) then asked if the Magistrate would state a case, but Mr. Marsham replied that he had dismissed the summons on the facts. Mr. Beck said as he understood the judgment it meant (1) that there was no special request for a specific article, (2) that there is a commercial standard for the article used as a domestic remedy, and (3) that the sale was not to the prejudice of the purchaser.

Mr. Marsham: No; I did not say the sale was not to the prejudice of the purchaser. I said the proper course would be for the chemist to ask the customer which kind he would prefer. There is no question of law. I found on the facts.

Mr. Jones said he and his friend (Mr. Beck) were very anxious to have the question of a commercial standard settled, and asked the Magistrate if he would consider any application made on the point within the next seven days. Mr. Marsham said he would be pleased to do so.

SWEET SPIRIT OF NITRE.

ON Wednesday, April 2, at Wolverhampton Police Court, before the Stipendiary Magistrate (Mr. N. C. A. Neville), Edward Spicer, grocer, 285 Willenhall Road, was fined 20s., and costs, for selling sweet spirit of nitre which was 23 per cent deficient in ethyl nitrite. Inspector Allwood said he did not press for a heavy penalty, but he submitted that the matter was important because the drug was sold at many small shops. The bottle from which the sample analysed was taken was marked "Raybould, Whitehouse & Co., manufacturing chemists, Dudley." Mr. Neville pointed out that the defendants had rendered himself liable to a penalty of 20s. for selling the drug in a weak state. He thought it might be advisable to prevent people carrying on a business they knew nothing about. They not only, as in this case, defrauded the public, but might be the means of doing serious injury as well.

New Companies & Company News.

SUPER-AÉRATION (MINERAL WATERS) IRELAND (LIMITED).—Capital 50,000*l.*, in 1*l.* shares (15,000 preference). Objects as dictated by the title. The number of directors is not to be less than three nor more than seven. The first are P. C. Bernard, Sir P. N. Grace, and J. Kiloh. Qualification, 100*l.* Remuneration, 100*l.* each per annum.

GENERAL FORAGE AND GRAINS DRYING COMPANY (LIMITED).—Capital 60,000*l.*, in 1*l.* shares (50,000 preference). Objects: To adopt an agreement made by this company with H. Lowe, to carry on the business of manufacturers of and dealers in foods for horses, cattle, dogs, poultry, &c., and to deal in brewers' and distillers' spent grains, corn-seeds, bran meal, and all substances and other ingredients suitable there for a wholesale, retail, and manufacturing chemists. No initial public issue.

BRITISH INDIAN OIL-MILLS (LIMITED).—Capital 30,000*l.*, in 1*l.* shares. Objects: To acquire the business of oil and manure manufacturers and merchants carried on by the British Indian Oil-mills at Garden Reach, near Calcutta, and the similar business carried on by the United British Castor oil Company (Limited) at Ossory Road, S.E., and to carry on and develop the same and any auxiliary business. No initial public issue. The first directors are J. H. G. Hill, J. R. D. Hill, Sir W. Thorburn, M.P., G. H. Brown, and A. S. N. Davis. Qualification, 200*l.* Remuneration not less than 250*l.* per annum divisible.

BRITISH IRON MILK SYNDICATE (LIMITED).—Capital 3,000*l.*, in 1*l.* shares. To adopt an agreement with W. White to acquire any inventions and rights relating to the manufacture of medicinal preparations, chemical products and foods, to develop and turn to account the same, and to carry on the business of chemists, druggists, dealers in medicines, &c. The first subscribers are: A. O. Williams, M.P., Castle Deudraeth, Merionethshire; W. W. Bruce, 29 Comeragh Road, West Kensington, gentleman; E. T. L. Williams, 1 Clement's Inn, Strand, solicitor; W. W. White, 165 Cromwell Road, S.W., merchant; J. Silcox, 7 Cremona Road, S.W., publisher; Mabel Lyzell, 180 Park Road, Crouch End, N., typist; and Amy J. Parvin, 60 St. Julian's Farm Road, West Norwood, S.E., typist. No initial public issue. The first directors are A. O. Williams, M.P., and W. W. Bruce.

C. MÜLLER (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To acquire the business of manufacturers of and dealers in surgical instruments and dealers in vulcanite, ebonite, indiarubber, and metal goods carried on at 61 and 65 Holborn Viaduct, E.C., as "C. Müller," to adopt an agreement between A. M. Edelstein and S. Strauss, and to carry on the same and the business of manufacturers of and dealers in medical appliances, optical, electrical, and scientific instruments, &c. The first subscribers are: S. Strauss, 10 Lyndhurst Gardens, N.W., diamond merchant; A. M. Edelstein, 23 Greencroft Gardens, N.W., merchant; Mrs. L. Strauss, 10 Lyndhurst Gardens, N.W.; J. Curtis, 56 Lamb's Conduit Street, W.C., clerk; F. C. Beard, 55 Avondale Road, S.E., clerk; Mrs. B. Edelstein, 23 Greencroft Gardens, N.W.; Miss E. Edelstein, 23 Greencroft Gardens, N.W. No initial

public issue. The number of directors is not to be less than two nor more than five. The first are S. Strauss and A. M. Edelstein. Qualification, 200 shares. Remuneration, as fixed by the company. Registered office, 64 and 65 Holborn Viaduct, E.C.

WESTHORPS (LIMITED).—Capital, 85,000*l.*, in 1*l.* shares (25,000 preference). Objects: To adopt an agreement between G. S. Pinchin, B. F. French, H. R. S. Krall, and E. W. Harrison for the acquisition of certain businesses carried on by the three first-named persons, and generally to carry on the business of manufacturers, importers, and exporters of and dealers in oakum lint, surgical dressings, and specialities for paper-making, also of hemp, jute, linen, cotton, wool, silk, textile materials, paper-pulp, indiarubber, papier mache, drugs, dyewares, paints, chemicals, apparatus, &c. The first subscribers are: G. S. Pinchin, 59 West India Dock Road, E., merchant; H. R. S. Krall, 23-25 Billiter Street, E.C., merchant; B. F. French, 52 Broadway, New York, merchant; E. Harrison, 3 Cambridge Road, Ilford, clerk; G. S. Herschell, 11 Uxbridge Road, Ealing, solicitor; A. Stone, 3 Lansdowne Place, Blackheath, B.A., gentleman; E. H. Larcombe, 32 Woodford Road, Watford, gentleman; and J. C. Coulter, 7 Bodney Road, Lower Clapton, clerk. No initial public issue. The first directors are G. S. Pinchin, H. R. S. Krall, and B. F. French. Qualification 1,000*l.* Remuneration 60*l.* per annum, divisible. G. S. Pinchin, chairman.

MEGGESON & CO. (LIMITED).—Warrants for the half-yearly interest on debentures and preference shares, and interim dividend on the ordinary shares, were posted on April 1.

OOWANA SOAP COMPANY (LIMITED).—We understand that the resolution in regard to the winding-up of this company, referred to in our issue of March 22, is purely voluntary, and was a necessary step in the process for increasing the capital of the company, which is being reconstructed under the title "Oowana (Limited)." The business will be continued under the same management and at the same address, 205 Victoria Street, London, S.W.

CHEAP AND GOOD (LIMITED).—From a circular issued by the Top Not Company, Glasgow, it appears that the company are extending their business under the title of "Cheap and Good (Limited)," to introduce a new system of trading. The gentleman who has consented to become the chairman is the proprietor of forty shops in another line, with thirty years' experience of multiple-shop trading. The circular says several well-known firms are putting money in the business, and the company will have a nominal capital of 25,000*l.*, in 1*l.* shares. It is proposed, after the business has been well started, to reflat into a big concern, "when the original shareholders will receive large profits." The *Financial Times* ironically remarks, "The offer of an interest 'on rock-bottom terms' does not look particularly enticing, and most people, we should think, will be quite content to wait until the concern has been 'well started.'"

SOUTHALL BROTHERS & BARCLAY (LIMITED).—At a meeting of the preference shareholders held at the Grand Hotel, Birmingham, on March 23, Mr. Thomas Barclay (the Chairman) proposed that the capital of the company be increased to 250,000*l.* by the creation of 60,000 preference shares of 1*l.* ea h, carrying dividend at the same rate and with the same priorities both as to dividend and capital, and with the same rights and privileges as the existing preference shares of the company. The shareholders generally, as was evidenced by the proxies sent in, showed that they appreciated the action of the directors in providing the new capital by the issue of preference shares instead of by debentures. Additional buildings, plant, and fixtures had to be provided in order to keep pace with the increase of the business. Since December 31, 1897, when the business was taken over, there had been an increase in leasehold land, buildings, and premises of 10,577*l.*; in plant, machinery, tools, and fixtures of 16,645*l.*; in stock-in-trade, 8,004*l.*; in amounts due from customers, 9,836*l.* These were subject to 3,444*l.* increase on the trade creditors, but the total increase in assets was 41,620*l.* To keep the business going it had been necessary for the directors to advance 16,859*l.* 16s. 7*d.*, and the bankers 10,683*l.* 15*s.* 7*d.* That was without taking into account the profit earned last year and the reserve. It was the intention of the directors to apply the amount raised from the preference shares to clear off these liabilities, to enable them to erect additional premises on the site of the Waterloo Tavern in Dalton Street, and also for completing

the purchase of new warehouses in Dalton Street, adjoining their own premises. The directors considered that 40,000 additional preference shares would, with the 9,000L subscribed for ordinary shares, be sufficient for present requirements. The proposition was seconded by Mr. J. Adkins (a shareholder), and unanimously agreed to.

Medical Gleanings.

SEASICKNESS.

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TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Monthly Accounts.

SIR,—I was considerably relieved to find through your issue of March 29 that your special contributor "Xrayser" had admitted the justice of my little note of complaint, and had endorsed it by a suggestion of his own, with which I heartily agree. I had hesitated more than a little before I sought your assistance to give expression to what, after all, is only a minor grievance. It is, however, the petty worries of business-life which add to the burden of those who are already pretty well hedged round by all kinds of embarrassments and pitfalls, particularly frequent in the practice of retail pharmacy; and as the pharmacist himself must in the main rely upon purely personal service to enable him to meet his engagements, any omission which in effect impinges upon his time results in a possible loss of income. I am much indebted to Mr. Umney for his explanation, and whilst I would not advise him to take all the drug-houses under his sheltering wing, I am sure he will be relieved to know that his excellent firm has no part in my indictment, for the statement from Southwark Street invariably arrives regularly and in good time. But after reflecting upon Mr. Umney's letter, I am just wondering whether this regularity is due to the systematic arrangement of the ledgers—a possible initial advantage—or the possession of a temper so exacting and erratic as to cause unmerited priority from the ledger-keeper. Unfortunately, payments to drug-houses *per se* constitute about a tithe of the present retailer's disbursement, and it may be that the enormous increase of manufacturing firms, who can have no actual knowledge of the difficulties which a retail druggist working single-handed experiences in managing the financial part of his business, accounts to some extent for the irregularity and laxity of which I originally complained. Taking last month as an example, I find that I had to deal with monthly accounts upon three separate occasions; had they been all rendered by the 8th inst., one clearing-off would have sufficed. The last payments were made on the 17th or 18th, and since that date two or three more have arrived, and must naturally remain unpaid till I am dealing with the first batch next month. Mr. Umney, an experienced and respected authority, says: "I hold that in all cases statements should be in the hands of the pharmacist . . . at least seven days prior to the date named for payment—say, about the 8th of the month." With such a pronouncement I am perfectly in accord; my only point of difference is—and in this respect I do not suppose Mr. Umney would dissent—that whether an account is due for payment on the 15th, 20th, or by the end of the month, the last statement should be in the hands of the retailer not later than the 8th inst.

AN ORDINARY RETAILER. (189/7.)

The Medicine-stamp Act.

SIR,—The genial criticisms of "Xrayser" of the *ex cathedra* type are usually so entertaining that I am almost unwilling to traverse his statements in regard to certain imaginary inaccuracies on my part. "Xrayser" is unfortunate in his examples. In any "united effort" surely the predominant partner—the Pharmaceutical Society—must, as the only legal and legitimate head of pharmacy, be officially represented. The affair of 1886 was one of the expiring efforts of the old Chemists' Detention Association; the concession following I alluded to. Still more important concessions have been obtained since, yet not the resultant of anything which meets my view of "united effort." Admittedly a most excellent text-book, I did not quote "Alpe" as a safe guide, because Somerset House refuses to recognise it as

authoritative. It is curiously coincident that Mr. Denniss, appearing for the Inland Revenue in the Brentford case (*C. & D.*, March 29), should emphatically say, "Alpe is no authority." At a later stage Mr. Denniss further stated, "The use of such words as 'cough-mixture,' &c., was a concession merely," thus corroborating my statement. In regard to verbal recommendation, "Alpe" alludes to this, and in THE CHEMISTS' AND DRUGGISTS' DIARY, as a footnote to Class 2 and Class 3, is printed in italics, "this and the preceding claim may be made verbally." What can there be either misleading or inaccurate in my remark that verbal recommendation had never been clearly defined, and should be? It probably goes as far as this: You may sell, e.g., essence of ginger, and recommend it for certain ailments verbally, but you must not claim verbally any special, exclusive, or secret method of manufacture. I maintain this is hazy. "Xrayser" next doubts the trade's acquaintance with the Stamp Act being so elementary as I assume, waiving my own correspondence and the numberless queries in the journals during the last three or four months. Mr. Glyn-Jones, speaking as the official head of the new Chemists' Defence Association, said that out of 200 cases submitted to them 198 were distinctly liable; moreover, the authorities have been so overwhelmed with labels, it is becoming a question whether this concession may not be withdrawn, because in 90 per cent. a small knowledge of the Stamp Act would have obviated any necessity for opinion. If this does not satisfy "Xrayser," the only alternative remaining is a sweeping reflection on the general probity of the craft, which I prefer not to suggest. "Xrayser" in saying such words as "recommended by eminent physicians" in the opinion of Somerset House do not constitute liability, is in direct conflict with "Alpe." My justification is this. I inquired by letter from Somerset House, "Do the words 'recommended, advised, ordered, &c., by eminent physicians, the faculty, &c.,' so commonly appearing on ordinary stock-labels, incur liability?" The reply was definite that such words do not. This correspondence is open to inspection. Finally, I did not raise the question of dispensing proprietaries as anything novel (though, oddly enough, it appeared new to several). My suggestion was that it created a difficulty between the physician and dispenser which the Board might obviate without loss of revenue. This, I think, disposes of all "Xrayser's" imaginary inaccuracies, though I willingly admit hasty preparation, for I understood my invitation from the Western Chemists' Association was merely to provide a basis for discussion on the Stamp Act. Whether the best interests of the craft may not lie in diplomatic methods rather than legal antagonism is a matter of purely personal opinion. I favour diplomacy. Yours faithfully,

285 Brockley Road, S.E., March 29. LEO ATKINSON.

Dewsbury and the Federation.

SIR.—I accept Mr. Broadhead's disclaimer with pleasure, and would assure him that I have no personal feeling whatever in the matter. I am simply the honorary servant for the time being of the Federation Executive, and in such impersonal capacity I penned my protest to his remarks which accompanied his resolution. Mr. Broadhead, by fixing on an incidental sentence, conveniently "rules out of court" the remainder (!) of my letter. By so doing he evades the issue—viz., that the arguments he put forward in favour of a West Riding Federation form the very best reason why the Dewsbury and District Chemists' Association should continue to give countenance to and assistance in furthering the interests of the forty Associations which comprise the National Federation.

Yours faithfully,

GEO. F. MERSON,

Hon. Secretary,

Federation of Local Ph. Associations.

Newcastle-on-Tyne, April 1.

An Irish Grievance.

SIR.—Permit me through the medium of your columns to draw attention to a state of affairs in Ireland, which in the interests of the profession ought to be remedied. I refer to the Pharmaceutical Council's acceptance of a certificate for the Registered Druggist's examination from a limited liability company. A young man who served his apprenticeship in a limited company (both partners in which are registered

druggists only) applied to the Society for examination as registered druggist. The Society accepted the certificate, and when questioned afterwards they said that the certificate was signed by one of the partners in the firm himself being a registered druggist. The young man passed his examination, and was registered as a registered druggist, and is about to open on his own account. In this case the Society cannot plead ignorance of the facts, for they were communicated with some months before the examination and the facts of the case laid before them. It happens that there are two other establishments in the neighbourhood, the proprietor of only one of which is an L.P.S.I. I leave it to your readers to conjecture what will follow. The qualified man, who, like multitudes of others, has spent some of the best years of his life in passing exams. in order to be properly qualified, is now hemmed in on both sides by two unqualified men, his business seriously interfered with, and a large share of his profits gone. The above is only one case out of many, and may be looked upon as typical. Some may say, "Oh, what harm can the registered druggist do the L.P.S.I.?" I answer, Every harm. At present to be a druggist is sufficient in the eyes of many, especially country people, who are not supposed to know the distinction, and naturally our registered druggist friend will carry on all departments of the business and compound medical prescriptions. Let no one answer, "He cannot, as he is not qualified." How many registered druggists in Ireland at the present time are busy compounding prescriptions whilst an apathetic Pharmaceutical Society looks idly on and takes no notice? It would be interesting to have a list of registered druggists prosecuted during the past year for compounding; I am afraid it would be almost a minus quantity. This is a question that cannot be lightly put aside. It is in the interests of the army of dispensing chemists and qualified assistants, who have spent years of honest toil and large amounts of money to qualify only to find a man who comes in so to speak by the back door enter into competition with them. Is this right? Is the Society alive at all? Is it safeguarding the interests of those who are properly qualified, and is it doing its best to prevent unlawful competition? These questions not only concern dispensing chemists, but the public at large.

Faithfully yours,
M.P.S.I. (181/40)

Cannabis Indica.

SIR.—I am obliged to Dr. McWalter and Mr. Maben for their friendly criticisms of my note on extract of cannabis indica. Both of these gentlemen, however, overlook the fact that I expressly disclaimed any intention to touch at all upon the chemical composition of the drug, and inferentially upon what constituent or constituents the medicinal value depends. I had by me published reports of the work done by the investigators named, but with the object I had in view I did not deem it necessary to load my paper with a résumé of these. The points I endeavoured to bring out, and which my experiments amply proved, were—

1. The B.P. extract of commerce is, physically, a very variable article. It contains to a greater or less extent an extract which, insoluble in 90-per-cent. alcohol, is soluble in water, and has all the characters of an aqueous extract of cannabis indica made after the drug has been exhausted with rectified spirit.

2. It varies from a syrupy consistency to that of a stiff paste, due to the relatively large variation in the percentage of water present.

3. An improvement upon the official process would be to exhaust the drug with absolute alcohol and prepare the tincture by dissolving the extract in spiritus aeratus.

Whether the therapeutic activity lies in the resin or in a volatile and evanescent body accompanying the resin, is foreign to the question; and until the *Pharmacopœia* gives some specific assay-process for the crude drug, I take it that uniformity in the physical characters of the extract is a step in advance of the varying article at present on the market, and with the object of furthering this my experiments were recorded.

Yours faithfully,
24 Newgate Street,
Newcastle-on-Tyne.

GEO. F. MERSON.

Ince on Emulsions.

SIR.—It may appear so much of an impertinence to criticise Mr. Ince that I hesitate to append my name, but

the purchase of new warehouses in Dalton Street, adjoining their own premises. The directors considered that 40,000 additional preference shares would, with the 9,000^{l.} subscribed for ordinary shares, be sufficient for present requirements. The proposition was seconded by Mr. J. Adkins (a shareholder), and unanimously agreed to.

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SEASICKNESS.

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a white crystalline substance soluble in alcohol, was first brought into notice by Hebra. It is used for softening scar-tissue, and Juliusberg has applied it in a series of cases of lupus. Juliusberg's formula is—

Thiosinamini.	...	...	...	gr. xlj.
Glycerini	...	...	...	3iss.
Aq. destil. ad.	...	...	...	3j.

This is used subcutaneously in doses of 16 minims, increased to 35 or 50. Other methods of using thiosinamine are plasters (10, 20, or 30 per cent.) and soap, but these forms are not at times so well tolerated.—*British Medical Journal*.

THE ACTION OF IODIDES.

DRS. RALPH STOCKMAN AND F. J. CHARTERIS, in investigating the action of iodides on the heart and circulation, mention that their observations show that potassium or sodium iodides, given to men by the mouth in therapeutical doses, do not modify the physical conditions of the circulation, and that therefore they neither directly weaken the heart nor dilate the arterioles. The therapeutical effects must be due to some other mode of action, and this is probably true also of some of the rarely occurring poisonous effects. It is sometimes observed, for instance, that iodides quicken and weaken the pulse, and this has been specially frequent in goitre; sometimes also their administration is followed by emaciation. There is good reason for believing that in neither case is this a direct effect, but is due to increased formation or alteration of the iodine-containing thyroid secretion, which has a powerful action on the circulation and on metabolism.—*Lancet*.



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Monthly Accounts.

SIR,—I was considerably relieved to find through your issue of March 29 that your special contributor "Xrayser" had admitted the justice of my little note of complaint, and had endorsed it by a suggestion of his own, with which I heartily agree. I had hesitated more than a little before I sought your assistance to give expression to what, after all, is only a minor grievance. It is, however, the petty worries of business-life which add to the burden of those who are already pretty well hedged round by all kinds of embarrassments and pitfalls, particularly frequent in the practice of retail pharmacy; and as the pharmacist himself must in the main rely upon purely personal service to enable him to meet his engagements, any omission which in effect impinges upon his time results in a possible loss of income. I am much indebted to Mr. Umney for his explanation, and whilst I would not advise him to take all the drug-houses under his sheltering wing, I am sure he will be relieved to know that his excellent firm has no part in my indictment, for the statement from Southwark Street invariably arrives regularly and in good time. But after reflecting upon Mr. Umney's letter, I am just wondering whether this regularity is due to the systematic arrangement of the ledgers—a possible initial advantage—or the possession of a temper so exacting and erratic as to cause unmerited priority from the ledger-keeper. Unfortunately, payments to drug-houses *per se* constitute about a tithe of the present retailer's disbursements, and it may be that the enormous increase of manufacturing firms, who can have no actual knowledge of the difficulties which a retail druggist working single-handed experiences in managing the financial part of his business, accounts to some extent for the irregularity and laxity of which I originally complained. Taking last month as an example, I find that I had to deal with monthly accounts upon three separate occasions; had they been all rendered by the 8th inst., one clearing-off would have sufficed. The last payments were made on the 17th or 18th, and since that date two or three more have arrived, and must naturally remain unpaid till I am dealing with the first batch next month. Mr. Umney, an experienced and respected authority, says: "I hold that in all cases statements should be in the hands of the pharmacist . . . at least seven days prior to the date named for payment—say, about the 8th of the month." With such a pronouncement I am perfectly in accord; my only point of difference is—and in this respect I do not suppose Mr. Umney would dissent—that whether an account is due for payment on the 15th, 20th, or by the end of the month, the last statement should be in the hands of the retailer not later than the 8th inst.

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The Medicine-stamp Act.

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the purchase of new warehouses in Dalton Street, adjoining their own premises. The directors considered that 40,000 additional preference shares would, with the 9,000⁰⁰ subscribed for ordinary shares, be sufficient for present requirements. The proposition was seconded by Mr. J. Adkins (a shareholder), and unanimously agreed to.

Medical Gleanings.

SEASICKNESS.

CODEINE gr. $\frac{1}{4}$ in an effervescent mixture is useful in vomiting from any cause. The following mixture has given good results in seasickness :—

Menthol.	...	...	...	...	gr. iss.
Cocaine	...	...	...	...	gr. ij.
Syr. simp.	...	...	...	...	3j.
Spt. vini rect.	...	...	...	...	3j.

M.

One teaspoonful to be taken every half-hour.

Among the remedies for seasickness suggested by correspondents of the *British Medical Journal* are hypodermic injections of strychnine and atropine. Dr. Percy McDougall from an experience of fifty cases believes the method will always give relief, if not cure. An injection of gr. $\frac{1}{10}$ strychnine sulphate and gr. $\frac{1}{100}$ atropine sulphate should be given at the first onset of discomfort or even just before embarking. In some cases the strychnine may be increased to gr. $\frac{1}{5}$ with benefit, and the injection may be repeated every two hours or less. The same drugs in the same doses may be taken by the mouth, but are less efficient. Another medical man mentions a case where 2 minim doses of ipecacualha wine every hour worked wonders.

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authoritative. It is curiously coincident that Mr. Denniss, appearing for the Inland Revenue in the Brentford case (*C. & D.*, March 29), should emphatically say, " 'Alpe' is no authority." At a later stage Mr. Denniss further stated, "The use of such words as 'cough-mixture,' &c., was a concession merely," thus corroborating my statement. In regard to verbal recommendation, "Alpe" alludes to this, and in THE CHEMISTS' AND DRUGGISTS' DIARY, as a footnote to Class 2 and Class 3, is printed in italics, "this and the preceding claim may be made verbally." What can there be either misleading or inaccurate in my remark that verbal recommendation had never been clearly defined, and should be? It probably goes as far as this: You may sell, e.g., essence of ginger, and recommend it for certain ailments verbally, but you must not claim verbally any special, exclusive, or secret method of manufacture. I maintain this is hazy. "Xrayser" next doubts the trade's acquaintance with the Stamp Act being so elementary as I assume, waiving my own correspondence and the numberless queries in the journals during the last three or four months. Mr. Glyn-Jones, speaking as the official head of the new Chemists' Defence Association, said that out of 200 cases submitted to them 198 were distinctly liable; moreover, the authorities have been so overwhelmed with labels, it is becoming a question whether this concession may not be withdrawn, because in 90 per cent. a small knowledge of the Stamp Act would have obviated any necessity for opinion. If this does not satisfy "Xrayser," the only alternative remaining is a sweeping reflection on the general probity of the craft, which I prefer not to suggest. "Xrayser" in saying such words as "recommended by eminent physicians" in the opinion of Somerset House do not constitute liability.

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NEWCASTLE-ON-TYNE, APRIL 1.

An Irish Grievance.

SIR,—Permit me through the medium of your columns to draw attention to a state of affairs in Ireland, which in the interests of the profession ought to be remedied. I refer to the Pharmaceutical Council's acceptance of a certificate for the Registered Druggist's examination from a limited liability company. A young man who served his apprenticeship in a limited company (both partners in which are registered

druggists only) applied to the Society for examination as registered druggist. The Society accepted the certificate, and when questioned afterwards they said that the certificate was signed by one of the partners in the firm himself being a registered druggist. The young man passed his examination, and was registered as a registered druggist, and is about to open on his own account. In this case the Society cannot plead ignorance of the facts, for they were communicated with some months before the examination and the facts of the case laid before them. It happens that there are two other establishments in the neighbourhood, the proprietor of only one of which is an L.P.S.I. I leave it to your readers to conjecture what will follow. The qualified man, who, like multitudes of others, has spent some of the best years of his life in passing exams. in order to be properly qualified, is now hemmed in on both sides by two unqualified men, his business seriously interfered with, and a large share of his profits gone. The above is only one case out of many, and may be looked upon as typical. Some may say, "Oh, what harm can the registered druggist do the L.P.S.I.?" I answer, Every harm. At present to be a druggist is sufficient in the eyes of many, especially country people, who are not supposed to know the distinction, and naturally our registered druggist friend will carry on all departments of the business and compound medical prescriptions. Let no one answer, "He cannot, as he is not qualified." How many registered druggists in Ireland at the present time are busy compounding prescriptions whilst an apathetic Pharmaceutical Society looks idly on and takes no notice? It would be interesting to have a list of registered druggists prosecuted during the past year for compounding: I am afraid it would be almost a minus quantity. This is a question that cannot be lightly put aside. It is in the interests of the army of dispensing chemists and qualified assistants, who have spent years of honest toil and large amounts of money to qualify only to find a man who comes in so to speak by the back door enter into competition with them. Is this right? Is the Society alive at all? Is it safeguarding the interests of those who are properly qualified, and is it doing its best to prevent unlawful competition? These questions not only concern dispensing chemists, but the public at large.

Faithfully yours,
M.P.S.I. (181/40)

Cannabis Indica.

SIR,—I am obliged to Dr. McWalter and Mr. Maben for their friendly criticisms of my note on extract of cannabis indica. Both of these gentlemen, however, overlook the fact that I expressly disclaimed any intention to touch at all upon the chemical composition of the drug, and inferentially upon what constituent or constituents the medicinal value depends. I had by me published reports of the work done by the investigators named, but with the object I had in view I did not deem it necessary to load my paper with a résumé of these. The points I endeavoured to bring out, and which my experiments amply proved, were—

1. The B.P. extract of commerce is, physically, a very variable article. It contains to a greater or less extent an extract which, insoluble in 90 per cent. alcohol, is soluble in water, and has all the characters of an aqueous extract of cannabis indica made after the drug has been exhausted with rectified spirit.

2. It varies from a syrupy consistence to that of a stiff paste, due to the relatively large variation in the percentage of water present.

3. An improvement upon the official process would be to exhaust the drug with absolute alcohol and prepare the tincture by dissolving the extract in spiritus aeriferis.

Whether the therapeutic activity lies in the resin or in a volatile and evanescent body accompanying the resin, is foreign to the question; and until the Pharmacopœia gives some specific assay-process for the crude drug, I take it that uniformity in the physical characters of the extract is a step in advance of the varying article at present on the market, and with the object of furthering this my experiments were recorded.

Yours faithfully,

24 Newgate Street,
Newcastle-on-Tyne.

GEO. F. MERSON.

Ince on Emulsions.

SIR,—It may appear so much of an impertinence to criticise Mr. Ince that I hesitate to append my name, but

surely in the twentieth century one should not write *ex cathedra* on emulsion-making without once dropping a hint that the oil should not be rancid, and that the mortar and bottle should be clean. Methinks I hear some indignant Briton protest, "Oh, it's only in Ireland that one need mention so self-evident a condition; we all know they should be clean." But I do not speak of ordinary gross palpable dirt: we must seek after a condition of cleanliness which approaches to sterilisation. Thus, when the mortar has, after cleaning, been several times washed out with boiling water, and dried on the stove, and the bottles submitted to the same process, most of the micro-organisms that make for fermentation will be absent, and the emulsion a success. The degree of acidity of the oil is another important factor—thus it is why olive oil is so variable in its results, and almond oil so much better generally. The bland cream oil, free from smell or taste, makes a delightful emulsion, and all the Inces on earth cannot make a good emulsion from the intensely acid, acrid, and rancid oil which is a couple of years old.

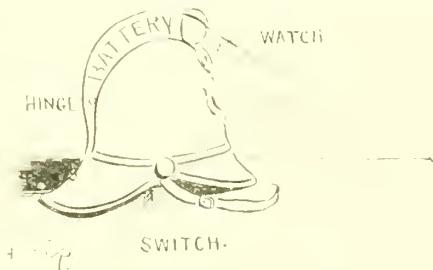
Yours truly,

Dublin, March 22.

L. A. H. I. (184/60.)

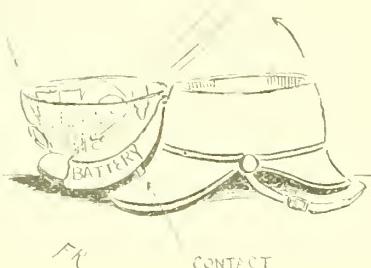
For Robert.

SIR.—Might I suggest a "first-aid helmet" for the London city police? The sketches will probably explain



themselves. The contents of the helmet are as follows:—

- 2 bandages,
- 1 simple tourniquet,
- 1 small roll lint on spool,
- 1 pair scissors,
- Some safety-pins,
- Small tin ribbon-plaster,
- 1 dose sal volatile, diluted ready for use.



The small dry-cell battery can be switched on at will, and lights up the interior of inverted apex automatically by contact.

Yours faithfully,

THE INVENTOR.

Leeds, April 1.

(FRED REYNOLDS)

The Apprenticeship Question.

SIR.—I have read with great interest a discussion, which for some considerable time has been occupying your valuable columns *re* the difficulty chemists find in obtaining apprentices to the profession in the home country, and in all the arguments brought to bear upon the subject it seems to me that the writers have quite overlooked (or wilfully neglected to state) the primary and more essential causes of the above state of affairs. In the present age "men are wide awake," and before sending their sons to any profession

or trade, naturally inquire into the various privileges, &c., connected with the particular branch in which they propose to educate them. Now, when we consider the privileges which our embryo chemist is to possess, any sensible man will admit without hesitation that they are *nil* in comparison with the other semi professions. The hours are unnecessarily long, responsibility great, pay small, examinations difficult; in fact, everything calculated to promote dull spirits, ill-health, and demoralisation; and no time allowed for careful study, thought, athletics, or other bodily exercise which, according to all medical science, is absolutely necessary to maintain that most desirable *mens sana in corpore sano*. So long as this state of affairs exists, and no steps are taken to have any one, or all, of these grievances removed, just so long will the chemist not only find himself unable to procure apprentices, but also to command the respect which his important calling entitles him to. In conclusion, I would like to inform the "young blood" at home that a much better state of affairs exists in this colony: the hours are short, pay good, the climate excellent, and employers aim at making their assistants comfortable by placing no unnecessary burden upon them, and giving every advantage possible: by these means life and work become a pleasure, and nota life-long yoke of persistent solitude and slavery.

Ladysmith, Natal, February 26.

SAM HOOP.

English Assistants Abroad

SIR.—Judging from the tenor of the letter of "Quite Enough" (C. & D., March 29, page 509) Parisian berths for English chemists' assistants are about as unsatisfactory as they are elsewhere. After a long and varied experience in different parts of the world, I have come to the conclusion that the young qualified chemist, if he is worth his salt, is as well off as an assistant in England as anywhere. Provided he takes a real interest in his employer's business, and if he does not object to long hours and hard work, he can earn from 2*l.* 10*s.* to 4*l.* weekly as salary, without selling his service to the drug-companies. I have never heard of any situations abroad where the extra remuneration is sufficient to cover the extra expenses *plus* the disadvantages of residence abroad. If qualified assistants were really alive to their own interests, they would hesitate before leaving England and engaging themselves for terms of years in other countries, because the prospects in the homeland are distinctly encouraging when we bear in mind the increased stringency of the qualifying examination, the dearth of apprentices, the gradual abolition of the indoor system, and the generally expressed desire among pharmacists for shorter hours of labour. I would like to draw attention to the ridiculous salaries offered to assistants in South Africa at present. It seems to me positively insulting to advertise a situation in Johannesburg, wages (not salary) 20*s.* per month, while the Transvaal Administration are at the present moment inviting applications from postmen for service in that country, and to whom they offer salaries varying from 200*s.* to 400*s.* per annum in addition to a prospective pension. Those thinking of leaving England for other climes should not engage themselves for a smaller salary than double they are capable of earning in England, otherwise, from a pecuniary point of view, they will most certainly reap disappointment. This is a rule which was suggested to me about a year ago by an agent in this country who engages numbers of assistants every year for situations abroad.

SENIOR. (19/91.)

London, W., April 1.

Dispensing Notes.

Aluminium chloride Pills.

SIR.—Some time ago we had a prescription for aluminium chloride pills, and I remember how unmanageable they were until Canada balsam was tried as an excipient. This made a good pill, which kept firm and dry for some time. They are now, however, very wet, although round, and I have them in a stoppered bottle. If aluminium chloride is to be used, it will be well to know something about the pharmacy of it. I do not much like the pilular form.

Yours faithfully,

R. O. (23/92).

A Camphor-mixture.

SIR.—The compounding of the following mixture may be of interest to many of your readers:—

Spt. camphor.	...	...	...	3ij.
Potass. iodid....	...	...	...	3ij.
Vin. colchici ...	...	...	...	3iss.
Sodii salicyl. ...	...	...	...	3ij.
Aq. ad ...	...	...	...	3ij.

The method I employed with perfect success was as follows: Dissolve the pot. iod. and sod. salicyl. in 3iss. aq. Put 3ss. mucilag. acaciae, diluted with 3ij. aq., in a mortar. Add the spt. camph. 3ij. and the remaining 3vj. aq. alternately, triturating briskly the while. Add this to the dissolved salts, and a most presentable mixture is obtained.

Yours,
Edinburgh. S. D. D. (179/53.)

178/57. *Cepia*.—The mixture is a very muddy one. We presume that is the point you wished cleared up.

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists Diary"—Trade Law or Pharmacy Law Sections.

189/33. *Walton*.—Your best plan in regard to the label is to have it registered at Stationers' Hall, which can be done for 5s.

185/53. *A. E. C.*.—Your label makes the article liable to duty because it is said to be "for liver, indigestion, costiveness, and piles."

184/47. *Aspirin and other Correspondents*.—Your powders, being composed of an entire drug, are exempt from stamp-duty, and you may call them what you like or recommend them as you please.

185/33. *Silva*.—The sentence, "It quickly cures pimples," on your skin-lotion is on the border-line of liability; but, so long as it is confined to the emollient skin-lotion (a toilet-preparation), the Commissioners of Inland Revenue have hitherto not interfered. It cannot be used on a blood-purifier.

181/34. *Devon*.—Off wine-licences are granted to individuals. See our DIARY for particulars.

182/2. *Cinthos*.—Does the rosemary and cantharidine hair-wash contain a poison? If it does, and the fact can be proved, it cannot be sold by grocers.

183/12. *E. H. S.*.—An unqualified person does not make his actions legal by employing a qualified man to manage his "chemist's shop." See our DIARY on the point.

187/60. *Medical*.—Of your six labels, three are liable—viz., "blood-purifier," because "it is much recommended for scrofulous affections, abscesses, . . . pimples, and skin-eruptions"; the "herbal cream," because it is "prepared only by" (the initials before the title may also involve liability); and the "corn-solvent" because it is for "rapidly and painlessly removing corns," &c.

183/42. *An Old Subscriber*.—If you are prepared to admit responsibility for the printing of the election bills your name may appear upon them as the printer. The course which you have followed is perfectly legal.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

180/13. *J. H. W.*.—Doubtless $\frac{7}{100}$ grammie is meant. This is sometimes written 0·07 ctgr. To convert into grains for ten powders multiply by 155.

185/52. *Cymro*.—We read the prescription for oils as follows: Ornum (oil of origanum), spike (oil of spike), mouns (ammonia), peter (oil of petre), brisk (oil of brick), turpentine (oil of turpentine), enteris (oil of Exeter), swallow (oil of swallow). For oil of brick the modern equivalent is linseed oil coloured with alkanet; oil of petre is represented by a mixture of turpentine (20), Barbadoes tar (1); whilst for oil of Exeter and oil of swallow green oil is given.

185/57. *Radium*.—The following books on organic chemistry and physical theories will suit you: Perkin and Kipping's "Organic Chemistry" (Chambers), 6s. 6d.; and Tilden's "Introduction to the Study of Chemical Philosophy" (Longmans), 5s.

185/32. *Velox*.—Mountant.—See DIARY, page 267, or last volume of *C. & D.*, page 900.

185/54. *T. L. N.*—Liquid Metal-polish:—

Precipitated chalk	...	...	...	3ij.
Terra rosa	...	...	...	3ij.
Liquid ammonia	...	...	...	3ij.
Methylated spirit	...	...	...	3ij.
Water to	...	...	...	3xx.

Mix.

Shake before use.

188/28. *Cornwall*.—You will find the following formula for Castration-ointment suitable for your purpose:—

Verdigris	...	...	...	1 oz.
Glycerin	...	...	...	1 oz.

Rub together in a mortar until perfectly smooth, then add to—

Margarine	$\frac{1}{2}$ lb.
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Mix thoroughly.

188/16. *N. Y. Z.*.—There is no University in Europe which grants the Ph.D. without residence at the University for a period of at least two years. See our Educational Number, September 7, 1901, for particulars.

188/37. *A. Pulco Caputo* (Palermo).—(1) The address of the Society of Chemical Industry is Palace Chambers, Bridge Street, London, S.W. (2) Berzosol is benzoyl guaiacol, and is, we presume, what you refer to.

164/70. *Mizpah*.—(1) The proportion of chalk in the plate-powder was, as far as we remember, about a third. (2) Levigated kieselguhr may be had from any wholesale house. (3) The liquid preservative used for meat, and applied by means of cloths, is calcium bisulphite.

173/24. *J. A. H.*—Essence of Vanilla.—See *C. & D.*, April 6, 1901, page 571.

158/63. *Woolbob*.—(1) We do not know enough about wool-carding and washing to be able to recommend a hand-book on the subject. (2) Ordinary unwashed sheep's wool contains 28 to 42 per cent. of a mixture of potash soaps and fatty matters. (3) Wool-fat Purification.—The following is an outline of the process of separating the fat from the wash-waters of woollen factories: Sulphuric acid is added to neutralise the alkali present, and waste steam blown through to facilitate the separation of the fatty acids, &c. (magma) from the watery fluid. After draining and filter-pressing (first cold, then hot) about 50 per cent. of the crude magma remains as a dirty press-cake. The crude magma contains about 35 per cent. of fat, and is bleached by means of potassium bichromate and sulphuric acid, and purified by boiling with water. Other processes involve the use of calcium chloride as a precipitant of the cholesteroloid bodies, and solvents such as petroleum spirit, acetone, and carbon bisulphide. A centrifugal process similar to that employed in separating cream from milk is also used for separating the suspended grease from the wash-water. If you study the lanolin patent (4992 of 1882) and the report of the lanolin lawsuit (*C. & D.*, November and December, 1893), you will gather much information about the subject.

179/55. *G. P.*.—To Turn White Flowers Red the stalks are put in water containing a red aniline dye, such as fuchsine, in solution.

178/27. R. W.—*Mist. Bismuthi Co.*—An alternative formula to the one given in "Pharmaceutical Formulas" is the B.P.C. recipe, which contains:—

Morph. mur.	...	...	...	gr. viij.
Tr. card. co.	...	...	...	5ij.
Chloroform.	...	...	...	3ij. mxx.
Ext. nuc. vom. liq.	...	...	...	3ij. mxxv.
Ac. hydrocyan. dil.	...	...	...	3v. mxx.
Liq. bismuth. conc.	...	...	...	3xv.
Aq. dest. ad	...	...	...	3xx.

Liquor bismuthi conc., B.P.C., is made in a similar way to liquor bismuthi (page 528 "Pharmaceutical Formulas"), but the quantities are as follows:—

Bismuth. subnitr.	...	...	...	1 oz.
Ac. nitrici	...	...	...	5 oz.
Ac. citri	...	...	...	5 oz.
Sodi bicarb.	...	...	...	8 <i>1</i> oz.
Liq. ammon.	...	...	...	6 oz.
Liq. ammon. citr.	...	...	...	12 oz.
Aq. q.s. ad.	...	...	...	50 oz.

177/59. D. F.—Liquor D'Hoffman in the hair-wash prescription is spt. aetheris co. The script has evidently been copied by a layman. The items "E. water" and "Pot. nitrat." are intended for β naphthol and pilocarpine nitrate.

177/73. G. F. G. G.—(1) Good Capsicums were found by Alpers to yield about 19 per cent. of oleo-resin (15 oz. from 5 lbs. of capsicums) by the ether extraction-process. (2) Silvering-paste:—

Silver nitrate	...	...	...	gr. xxxvj.
Potassium cyanide	...	...	...	5j.
Water	...	...	...	3j.

Dissolve the nitrate in half the water and the cyanide in the other half; mix, and add to—

Precipitated chalk	...	...	...	9v.
Cream of tartar	...	...	...	gr. v.

Make a paste.

To use the paste, clean the surface thoroughly and apply the paste, allowing it to remain overnight, when it is brushed off, and the process repeated if necessary.

173/53. Metol.—(1) Dry Metol-quinol Developer:—

A.

Metol	...	...	...	100 gr.
Quinol	...	...	...	50 gr.
Powdered sodium sulphite	...	...	...	2 oz.

B.

Sodium carbonate	...	...	...	1 oz.
Potassium bromide	...	...	...	60 gr.

The powders A and B, which are best packed in glass tubes, are each to be dissolved in 1 pint of water to form a developer.

(2) Dry Quinol Developer:—

A.

Quinol	...	...	...	80 gr.
Potassium metasulphite	½ oz.
Potassium bromide	10 gr.

B.

Lithium carbonate	80 gr.
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Dissolve the two powders in a pint of water.

(3) Dry Pyro-soda Developer:—

A.

Pyrogallol	80 gr.
Sodium sulphite	...	...	...	2 oz.

B.

Sodium carbonate	...	...	...	2 oz.
Potassium bromide	...	...	...	20 gr.

Each powder is dissolved in 1 pint of water.

Anhydrous sodium sulphite and calcined sodium carbonate give the best result in dry developers.

174/47. Sivel.—Dark-room—There is no book published on the construction of dark-rooms, but the following details will be sufficient to guide you in building one. Do not build a smaller dark-room than 6 feet 6 inches high by 5 feet by 4 feet 6 inches, and let there be a sliding panel of

white and red glass for working with. The size of the red glass should not be too large. For evening work a dark-lantern is required, to illuminate which either gas or electricity should be supplied. A bench should be fixed beneath the source of light for working on, and on one side a lead-lined or glazed-earthenware sink fitted with overflow-plug. The water-supply should have a swing-arm tap. The end of the bench near the sink should be sloped, covered with lead, and supplied with a levelled grille for resting the dishes on whilst developing. A convenient size for the sink is 30 by 19 by 4 inches, and the top of the bench is conveniently placed at 3 feet from the ground. Underneath the bench shelves for dishes should be placed, and a special position assigned to the fixing-bath. On the wall shelves will be required for bottles and measures. It is usual to paint the interior of the room a flat slate. The ventilation should not be neglected, but it is a simple matter when the room is out of doors. Care must be taken that the door and windows are light-tight.

184/14. J. T.—The most recent information on removing superfluous hair is giving in the C. & D., December 28, 1901.

184/53. Mizpah—Your inquiry has had to be held over owing to pressure on space.

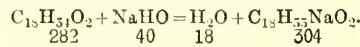
184/67. G. J. G.—Books on Diseases of the Horse—Gresswell's "Manual of Equine Medicine," 10s 6d. (Baillière); Robertson's "Practice of Equine Medicine," 25s. (Baillière); Mayhew's "Illustrated Horse-doctor," 10s. 6d. (W. H. Allen).

106/33. P. R. C.—Olater's "Every Man his Own Cattle-doctor," edited by Mayhew, is published at 21s. by Warne.

181/60. W. S.—You do not give any information in your inquiry as to what cement you used, or what kind of belts you wish to unite. Machinery-belt cannot be efficiently united by cement.

173/3. W. J. S.—(1) We note the photographic tip, and shall use it soon. (2) The steps to take for obtaining a patent are given in THE CHEMISTS' AND DRUGGISTS' DIARY. Is the method of preventing steamy windows new? If it has been used before, you cannot get a valid patent.

183/18. E. & H.—Hard Soap.—For every 282 parts of oleic acid 40 of caustic soda is required by theory; in practice, a slight excess is ordinarily employed. The strength of the ley used varies with the percentage of water required in the finished soap; thus, if to 282 parts of oleic acid 140 of ley be added containing 45 of caustic soda, the resulting soap will contain 304 parts of anhydrous soap and 5 of caustic soda. Neglecting loss by exudation and evaporation, the finished soap will contain 113 parts of water, or 273 per cent. The reaction is—



The oleic acid is heated in a steam-jacketed pan furnished with an efficient agitator, and the ley run in; the whole is then agitated to complete the reaction, and transferred to a "cooling-frame" in which it solidifies.

184/45. C.—(1) Please supply further information about the "remedy for fits." (2) Dried yeast is reckoned as being three times as strong as fresh yeast, the latter containing from 40 to 80 per cent. of water.

203/12. Ulver asks for a reliable method for proving the presence of free sulphuric acid or hydrochloric acid, or both, in organic extracts, which may possibly contain soluble sulphates and chlorides, and acids of fermentation, such as acetic, lactic, &c. The extract is a liquid extract (containing a large amount of tannic acid), as used by tanners for making leather, and there is a suspicion that sulphuric acid or hydrochloric acid has been added to it—a not uncommon practice, it appears. [Our correspondent's problem is one of considerable difficulty. An approximate answer is the most that could be furnished, and to supply even this several quantitative determinations would be required. We would suggest, first, the gravimetric determination of chlorine and of the SO₄ radical in a weighed quantity of the original extract; then the careful incineration of another weighed

quantity of the extract (with due observance of all the precautions that must be taken in effecting the incineration of such materials), and the determination of the chlorine and of the SO₂ radical in the ash. If the proportion of chlorine was found to be less in the second determination than in the first, this would indicate that hydrochloric acid had been driven out (presumably by free sulphuric acid) during the process of incineration. If no chlorine was found in the ash, and the proportion of SO₂ radical was also less than in the original extract, this would indicate more clearly that the latter had contained free sulphuric acid. Comparison of the results obtained in these determinations, with the results of similar experiments carried out with an extract of the same kind, but known to have been prepared from materials to which free hydrochloric or sulphuric acid had not been added, would be a valuable check.]

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

- 114/6 Makers of "Rolo" or "Roll" fly-oil?
- 190/46. Makers of "Royal Crown" stramonium cigarettes?
- 187/65. Where can "Merrit's Liverettes" be obtained?
- 191/73. Where are Howard's headache-powders obtainable?
- 183/38. What are "soap-oil," "grape-seed oil," and "melon spirit"?
- 183/58. What is "American soap," used for removing tattoo-marks, or where can it be obtained?

Australasian News.

Chiefly from "The Chemist and Druggist of Australasia," February 1, 1902. 6d. per copy, post free.

POISON LAWS—Mr. A. B. Cowling, at the half-yearly meeting of the Pharmaceutical Society of South Australia on January 23, read a paper on "The Poison Laws in South Australia," dividing his subject into (1) What we possess, (2) What others enjoy, (3) What we want. Mr. Cowling's wants were modest in the extreme.

PHARMACY COMPETITION.—The gold medal awarded by the Pharmaceutical Society of South Australia for a competition in practical pharmacy and a paper on the poison laws was this year gained by Mr. Hoddle. The competitors had to make sulphurous acid, spt. ammon. arom., ferri carb. sacch., hydrarg. oxid. rub., and syr. ferri iodidi. The products were analysed to see how far they corresponded with the Pharmacopoeia requirements.

PHARMACEUTICAL EXAMINATIONS.—A special feature is made of examinations in the February issue of the *C.D.A.* Portraits and biographies are given of most of the examiners of the Commonwealth. Many of the examiners own Great Britain as their birthplace. A paper by Dr. Peter T. Austen gives some instruction as to the why and wherefore of examination-questions. The idea of examination-papers should be to test not only the knowledge possessed by the student, but also the working of his mind upon the particular subject, which will show more clearly the nature and condition of a mind than the daily recitation, because the case is more capable of systematic study, and can be made to cover larger fields of mental activity. Dr. Austen does not suggest that such examinations should replace the regular recitation, but he believes they should be held frequently, and should serve a far wider purpose than that of merely noting the quantity of knowledge absorbed by the mind. Such an examination is not a mere matter of testing and registering, it is a creative exercise of the mind.

WHAT A YOUNG VICTORIAN THINKS.—Another view of pharmacy in England is given by a young Victorian who, writing home, says:—

I got THE CHEMIST AND DRUGGIST supplement, answered several advertisements, and got four answers at the marvellous salaries of

from 30*l.* to 35*l.* a year indoors. . . . English "biz" is mainly governed by the marvellous penny. It is all "penn'orths," and one will rush about for an hour or so, and on looking into the till will find only a couple of shillings. On account of the chemists' curse, "the inspectors," you are in a state of terror when any decent looking person comes in for a penn'orth of sweet nitre. . . . Scrips are almost unknown, except in the best shops, as Squire's, &c. In this shop where I am now it is a great event to get a scrip. There is no scr p book, and the dispensing scales would defy description. . . . I called on the Pharmaceutical Society to find out about the Minor. To my astonishment I will have to do the Preliminary again. I had an interview with Mr. Benbridge, the Registrar, who, like most officia's, is very fond of arguing in the abstract, and quoting from by-laws. It was placed to the blame of the Colonial Secretary (Chamberlain) that I am compelled to go through the Preliminary again. By the way, they charge 10*l.* 10*s.* for the first shot at the Minor, and they do not reckon one is ready for it till he puts in six to nine months' graft from 9 to 5 daily. In fact, one requires to be a millionaire to pass the English examination, and when he has done so he gets 30*l.* per annum indoors.

Coming Events.

Notices of forthcoming meetings are inserted in this section free of charge. Secretaries should send such notices to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C., so that they may be received not later than Wednesday of the week of publication; if later, by telegram to "Chemicus London."

Monday, April 7.

Society of Chemical Industry (London Section), Chemical Society's Rooms, Burlington House, Piccadilly, at 8 P.M. Mr. E. Sanger Shepherd on "Some Recent Improvements in the Photography of Colour."

Tuesday, April 8.

Bradford Chemists' Association. Annual dinner.

Wednesday, April 9.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association, 94 W. Regent Street, at 9.15 P.M. Annual business-meeting. Election of office-bearers and discussion of proposals of interest to assistants.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C., at 11 A.M. Monthly Council-meeting.

Manchester Pharmaceutical Association, Victoria Hotel. Annual general meeting.

Newcastle-on-Tyne Chemists' Association, Hôtel Métropole, West Clayton Street, at 8.30 P.M. Mr. F. R. Dudderidge on "Tests for Arsenic," and Mr. W. Graham on "Optics."

Young Chemists' Association. Business meeting of the Association, in the Working-men's Club, Gallowgate, Newcastle-on-Tyne, at 8.15 P.M.

Thursday, April 10.

North Stafford Chemists' Association, Alexandra Hotel, Stafford. Annual meeting and dinner, at 4.30 P.M. Tickets, 5s. each, may be had from Mr. Edmund Jones, chemist, Hanley.

Reading Chemists' Association. Conversazione.

Chemists' Assistants' Association, 73 Newman Street, Oxford Street, W., at 9 P.M. "Notes on some Pharmacopoeial Preparations," by Mr. E. A. Andrews.

Grimsby Chemists' and Druggists' Association, Oberon Hotel, at 7 P.M. Annual meeting and dinner.

Friday, April 11.

Photographic and Optical Exhibition, Portman Rooms, Baker Street, W., opens.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, W., at 9 P.M. Professor Dewar on "Problems of the Atmosphere."

ROYAL VICTORIA HALL, WATERLOO ROAD, S.E.—The following are the arrangements for Science-lectures, on Tuesdays, at 8.30, during the month of April at the above Hall:—April 1, Mr. Richard Kerr, F.G.S., on "Curiosities of Nature." April 8, Mr. Bennett Brough, "The Iron Mines of the World." April 15, Mr. W. H. Shrubsole, F.G.S., "Microscopic Marvels of the Thames." April 22, Mr. Corbett on "Ceylon." April 29, to be announced later.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: April 3.

BUSINESS has not yet been fully resumed on the markets, but the tone is rather better than was expected immediately after the holidays. Quinine is a "waiting" market, with a scarcity of sellers in anticipation of an advance in the bark unit at Amsterdam to-day. Considerably higher prices are again asked for cod-liver oil, which preclude business. Cream of tartar has a firmer tendency owing to higher prices asked from France. Japanese crude camphor is again offering at lower prices for shipment, but the "monopoly" quotations are unchanged. Belgian castor oil is a trifle easier. Shellac closed dearer previous to the holidays, but since then little has been done. The following table shows the principal fluctuations of the week:—

Higher	Firmer	Easier	Lower
Cinchona Oil, cod liver Pepper (black) Shellac	Cream of tartar Golden seal	Benzols Canary-seed Oil, castor (Belg.) Pepper (white)	Camphor, crude (Jap.) Oil, cumin Oil, orris (concrete)

Arrivals.

The following drugs, chemicals, &c., have arrived at the principal ports of the United Kingdom from March 26 to April 2, inclusive:—Acid, carbolic, 113; acid, citric (@ Bordeaux), 12; acid, tartaric (@ Rotterdam) 39, (@ Bordeaux) 41; argol (@ Bordeaux), 121; arsenic (Span.), 75; buchu, 55; canary seed, 53; cardamoms, 109; caraway-seeds, 153; camomiles, 42; cascara sagrada, 116; castor oil (Fr.) 84 cks., (Ital.) 120, (@ Rotterdam) 150, (Belg.) 206, (@ Calcutta) 1,125 c.s.; cochineal, 32; cod liver oil (@ Norway) 457, (@ Rotterdam) 100, (@ Hamburg) 45; chamomilla, 42; chillies (Jap.), 350; cinchona (I.L.), 52; citronella oil (@ Galle), 15 drums; coca-leaves (Ceylon), 5; cream of tartar, 181; croton-seed, 20; cubeb, 6; cumin-seed, 292; essential oils (from Messina) 96 pkgs., (@ Lishon) 21 c.s.; galangal, 67; gentian, 27; ginger (Jam.) 1,116, (Jap.) 1,470, (African) 1,151; gnm thns, 250; honey (Jam.), 17 cks.; jaborandi, 4; lime-juice (Jam.) 10 puns., (@ Messina) 25 pp., (@ Dominica) 46 brls.; lime oil (@ Dominica) 19; menthol (Japan), 15; musk-seed (W. I.), 1; nux vomica (@ Malras), 257; peppermint oil (@ N. York) 16, (@ Japan) 20, (@ Bordeaux) 75; pot. pruss., 1†; quicksilver (Span.), 13; quinine (@ Batavia), 100 c.s.; saccharin, 4; saffron, 1 c.s.; salt-petre (@ Calcutta), 1,310; sarsaparilla (@ N. York) 35, (@ Colon) 7, (@ Panama) 15; soda bicarbonate (@ N. York) 328; soy, 56; sulphur (@ Catania) 1,200 pkgs. 100 tons, (@ Italy) 400 bgs. 485 cks.; tartar (Span.) 202, (French) 258; wax, ceresin, 80, (@ Dusseldorf) 35; wax, bees' (Mor.) 82, (Jam.) 5, (Italian) 7; wine lees (@ Bordeax), 328.

The World's Quicksilver Production.

The following table covers practically the quicksilver output of the world with the exception of Mexico. The figures are in metric tons:—

	1900	1901	Per Cent.
Austria ...	550	512	- 6·9
Italy ...	220	278	+ 26·4
Russia ...	310	368	+ 8·2
Spain ...	1,111	846	- 23·9
United States ...	967	992	+ 2·6
Total ...	3,188	2,996	- 6·0
Total flasks ...	91,873	86,340	- 6·0

The production of Italy includes all the working mines. That

of Austria is from the Idria mines. The Spanish output includes 786 tons from Almaden, and 80 tons from the smaller mines. The Mexican production in 1901 was 335 tons, and if the same figures are allowed for 1901 it would bring the world's total production for the year up to 3,331 metric tons, against 3,523 tons in 1900.

West Indian Kola.

The Director of the Jamaica Botanic Gardens, in his annual report for 1901, states that kola is still being planted to some extent, and that 539 seedlings were distributed during the year. Dr. Preuss, Director of the Botanic Gardens in the Cameroons, when lately on a visit to Jamaica, said that the kola grown in that island was the best of the elible species of West African, and that it was the finest he had seen.

Heavy Chemicals.

Business in the heavy-chemical market has naturally been much interfered with since last writing by the holidays, so that there is really little fresh to be reported. The tone of the market continues to be of the same quiet nature, with home-trade demand fairly good and steady, whilst the export business is still only poor.

SULPHATE OF AMMONIA is rather quieter, but firm tone shows no indication of decline. Present values are, roughly, 5s. per ton higher than those last given.

ALKALI PRODUCE.—Bleaching-powder rather quiet, but if anything moving a shade better than it was. Softwood casks, free on rails, 6l. 7s. 6d. per ton; f.o.b. Tyne or Liverpool, 6l. 10s. per ton. Caustic soda quiet; 76 to 77 per cent., 10l. 7s. 6d. to 10l. 15s.; 70 per cent., 9l. 15s. to 10l. per ton; and 60 per cent., 8l. 15s. to 9l. per ton. Ammonia alkali, 58 per cent., well maintained, both as regards demand and value; 4l. 10s. to 4l. 15s. per ton, in bags, free on rails. Chlorates of potash and soda still keep very low, and there is not much doing: potash, 2½d. to 3d. per lb., and soda, 3½d. to 4d. per lb. Bicarbonate of soda moving steadily, at 6l. 7s. 6d. to 6l. 12s. 6d. per ton in large casks, and 6l. 15s. to 7l. per ton in 1-cwt. kegs, f.o.b. Liverpool. Soda crystals in steady request at unchanged rates of 67s. 6d. per ton, f.o.b. Liverpool, and 62s. 6d. per ton, f.o.b. Tyne. Saltcake dull, at 23s. per ton, free on rails, in bulk. Yellow prussiate of potash still quiet, at 5½d. to 5¾d. per lb. for best Lancashire makes. Sulphate of soda (Glauber's salts) in steady request, at 30s. to 32s. 6d. per ton, in bags, free on rails. Hyposulphite of soda in heavier demand, but without improvement in value: 6-8-cwt. casks, 5l. 10s. to 5l. 17s. 6d. per ton, and 1-cwt. kegs, 6l. to 7l. 5s. per ton, according to quality and quantity. Silicates of soda unchanged; 140° Tw., 4l. 2s. 6d. to 4l. 12s. 6d. per ton; 100° Tw., 3l. 12s. 6d. to 4l. 2s. 6d. per ton; 75° Tw., 3l. 5s. to 3l. 15s. per ton, f.o.b. Liverpool or Tyne, in usual casks.

Liverpool Drug-market.

Liverpool, April 2.

CASTOR OIL.—The s.s. *Craftsman* has arrived with a further supply of good seconds Calcutta, and 2½d. per lb. continues to be quoted from the quay and 3d. is asked in store. First-pressure French is unchanged at 2½d. to 3d. per lb. Second-pressure French is still held nominally for 2½d., but this figure might be shaded.

QUILLAJA-BARK.—The firmness recently noticed in this article is fully maintained, and further sales are reported at 12l. 15s. to 13l. per ton.

BEESWAX.—The market has been slack, probably due to the holidays. Values still range from 7l. 7s. 6d. to 7l. 15s. per cwt. for Chilian, according to quality.

AFRICAN GINGER is slightly easier, at 30s. 6d. to 31s. per cwt. in quantity from the quay.

FENUGREEK-SEED.—Further business is reported in Mogador at 7l. per ton.

CANARY-SEED.—Sales are reported of fine bright Turkish, at 35s. per qr.

TURPENTINE has eased off slightly for the week, and 31s. 6d. per cwt. is the value now.

SCAMMONY-ROOT.—A sale of 5 tons is reported at 26s. per cwt.

German Drug-market.

Hamburg, April 1.

Business is very quiet at present owing to the holidays.

ALOES (CAPE) is steady at 76m. per 100 kilos.

CAMPHOR (REFINED) is unchanged, makers asking 435m. per 100 kilos, while second hand will take a few marks less.

CONDURANGO remains firm—in first-hands at 150m., and 130m. to 135m. per 100 kilos. from second-hands.

ERGOT is scarce; Spain and Russia are offering very little at present, and prices here are unchanged.

COCA-LEAVES are dearer at 260m. to 270m. per 100 kilos. An advance in cocaine is anticipated.

LYCOPODIUM keeps very firm, 460m. per 100 kilos.

GOLDEN SEAL is firmer, and 520m. per 100 kilos. is now asked.

QUININE is unchanged at 41m. per kilo.

JAPANESE WAX is very firm at 69 $\frac{1}{2}$ m. per 100 kilos. spot.

STAR ANISE is quiet and easier at 125m. per 100 kilos.

OILS (ESSENTIAL).—Star anise is unchanged at 10 $\frac{1}{4}$ m. per kilo., Japan peppermint is firmer at 8 $\frac{1}{2}$ m. per kilo., and HGH is quoted at 8 $\frac{1}{2}$ m. per lb.

OILS (FIXED).—Cod-liver is very firm and dearer at 90m. for old and 95m. per barrel for new oil. Linseed is dull and lower. Castor quiet, and very little doing.

Cablegrams.

THE following cable was received too late for insertion in our last issue: New York, March 27. Tame markets here. Opium is easy at \$2.90 per lb.; quinine strong at 28c.; menthol higher at 84c.; ergot firm at 40c.; golden seal hardening: 50c. is now asked; codeine declined 20c. per oz.

* * * * *

NEW YORK, April 3:—Quiet markets are reported. Opium is neglected, at \$2.90 per lb. Golden seal (hydrastis) is higher, at 52c. Genuine jaborandi-leaves are scarce, at 18c per lb. Round buchu-leaves are steady, at 18c. Menthol is higher, at 84c per lb. Star-anised oil is easy, at \$1.10 per lb.; and cocoa-butter is also easy, at 29c. per lb.

* * * * *

BERGEN, March 26, 6 P.M.:—The fishing continues bad, and new oil is very firm, being now held at 95s. per barrel, f.o.b. The catch at the above date amounted to 20,288 000 cod, against 16,990,000. This is expected to yield 11,568 barrels, against 16,730 barrels at the same time last year.

* * * * *

BERGEN, April 2, 6.45 P.M.:—The market here is rising, and 103s. per barrel, f.o.b. Bergen, is now quoted for best non-congealing medicinal oil. The fishing continues unsatisfactory, the total catch of cod to date being 22,846,000 against 20,612,000 at the same time last year. This is estimated to yield 12,797 barrels against 20,760 barrels last year.

* * * * *

HAMBURG, April 3:—Business here is quiet, and there are no price-alterations to report.

* * * * *

SMYRNA, April 2, 4.15 P.M.:—The sales of opium for the week ending to-day (Wednesday) amount to 70 cases, including current talequale at 7s. 4d. per lb., and richer qualities 7s. 6d. to 7s. 8d. per lb., f.o.b. Smyrna.

* * * * *

AMSTERDAM, April 3:—At the auctions of cinchona held here to-day 6,780 packages were offered (containing the equivalent of about 30 tons of quinine), of which 5,443 packages were sold at an average unit of 8 60c. per $\frac{1}{2}$ kilo, against 7.95c. paid at the auction on February 26. The following were the approximate quantities of quinine purchased by the principal buyers: English and American factories, who purchased the equivalent of 7,932 kilos.; the Brunswick factory, 2,259 kilos.; the Mannheim and Amsterdam factories, 6,048 kilos.; the Frankfort-on-Main and Stuttgart factories, 4,824 kilos.; and various buyers, 3,161 kilos. The prices paid for the manufacturing bark ranged from 8s. to 84c. per $\frac{1}{2}$ kilo; and druggists' bark from 8 $\frac{1}{2}$ c. to 59 $\frac{1}{2}$ c. per $\frac{1}{2}$ kilo.

—

ACID, CITRIC, is quoted 1s. 0 $\frac{1}{2}$ d. to 1s. 0 $\frac{1}{2}$ d. per lb.

ALOES.—The following figures relating to the exports from Cape Colony are taken from official records furnished by our Cape correspondent:—

	1901	1900	1891	1890
Quantity (lbs.) ...	338,503	475,362	469,999	642,661
Value (£) ...	1,955	3,047	2,666	3,641

Last year Germany imported 146,483 lbs.

BUCHU.—Fifty-five bales have arrived this week, which, according to the importer, are the last of the new crop.

The following figures relate to the exports from Cape Colony:—

	1901	1900	1891	1890
Quantity (lbs.) ...	220,303	229,197	114,513	55,560
Value (£) ...	5,665	4,367	1,117	341

CAMPHOR—Crude Japanese is again lower, with sellers of April-June shipment at 142s. 6d. per cwt., c.i.f., but there

seems no disposition to operate at this price for distant shipment. "Monopoly" quotations are unchanged at 165s., c.i.f., from Formosa, and 185s., c.i.f., for pressed. English refiners are firm at present quotations.

CANARY-SEED is rather easier, the price of fair Turkish on the spot being now 36s. 6d. per quarter.

CASCARILLA.—For thin stringy quality 45s. per cwt. has been paid, showing no change.

CINCHONA.—The shipments from Java to Europe during March amounted to—

	1902	1901	1900	1899
March (Amst. lbs.)	631,000	875,000	650,000	977,000
Jan. to Mar. ,	2,155,000	2,623,000	1,906,000	2,025,800

COCAINE is unchanged, and although it has been "talked up" lately by makers and their agents, it is asserted on good authority that in face of the still heavy stocks of crude cocaine in Hamburg an advance is not justifiable. Moreover, the present price of hydrochloride is very high, and while it is so the output of the crude alkaloid is being maintained.

COCOA-BUTTER.—The result of the auction held at Amsterdam on April 1 is as follows:—Seventy tons Van Houten's sold at 63 $\frac{1}{2}$ s. to 70c. (average price 66 90c., against 64 $\frac{1}{2}$ c. at the previous auction); 13 tons de Jong sold at 62 $\frac{1}{2}$ s. to 64c.; 3 $\frac{1}{2}$ tons Helm sold at 62 $\frac{1}{2}$ s. to 62 $\frac{1}{2}$ s.

CREAM OF TARTAR.—Higher prices are asked by French manufacturers which has caused a firmer feeling here, but quotations are as yet practically unaltered, best white French crystals being quoted 70s., 95-per-cent. powder 72s., and 98-per-cent. powder 74s. per cwt.

DRAGON'S-BLOOD.—A few cases of thin bright finger in reeds have been sold at 97. 10s. per cwt.

ERGOT.—For Spanish 1s. 6d. to 1s. 8d. per lb. spot has been paid this week, the latter figure for good sound quality, and there are further offers at 1s. 7d. Russian is also obtainable at 1s. 7d. spot.

GAMBIER.—Cubes are quiet with small sales of good at 36s. per cwt.

GAMBOGE.—Good blocky pipe has been sold at 167. 10s. per cwt., and 17l. is now wanted, at which only a few cases are offered. Cables sent to Singapore elicit that there is nothing to be had.

GOLDEN SEAL comes a shade dearer from the United States, but there is little demand here, 2s. 2 $\frac{1}{2}$ d. per lb. net being the spot price.

OIL, ANISE, STAR.—Market is inactive, with small sales at 4s. 4d. per lb. spot, and further sellers thereat.

OIL, CASTOR.—Quiet, at 3d. per lb. on the spot for Calcutta seconds. Medicinal French is unchanged at 31s. 6d.; and Belgian of first pressing is quoted easier at 25s. and 25s. for seconds. Hell make for July-October or July-December delivery is quoted 25l. per ton for firsts, and 24l. for seconds, in barrels, ex wharf London.

OIL, COD-LIVER.—Writing on March 29 our Bergen correspondent states that the Easter holidays have considerably interrupted the fishing in the Lofotens, with the result that there has been little increase in the quantity caught. The exports from Bergen to date amount to 2,631 barrels, against 2,416 barrels at the corresponding period of last year. (For latest quotation, see our cablegram.) In London, prices have also advanced in sympathy with Norway, and agents are now quoting from 105s. to 110s. per barrel, c.i.f., according to brand, though we understand business has been done at 102s. Good Newfoundland oil is quoted 3s. 6d. per gal., c.i.f.

OIL, CUMIN, has been reduced to 11s. per lb.

OIL, ORRIS (CONCRETE).—The list-price has been reduced to 15s. per oz.

OIL, PEPPERMINT.—American HGH is inactive with sellers at 8s. 10 $\frac{1}{2}$ d. per lb. Japanese dementhrolised has been in more inquiry, but prices show no change. English is listed at 25s. per lb. net.

OPIUM.—Our Constantinople correspondent writes on March 29 that there is a general disposition all round on the

part of buyers to operate at present prices. We doubt very much if prices will recede any further until the crop, which is progressing very favourably, is safely gathered in. The week's sales amount to 12 cwt. "Druggists'" at 7s. 3d. per lb. Market continues very quiet.

QUININE—Previous to the holidays the second-hand market closed slightly easier, with small sales at 1s. 2d. per oz. for June delivery, but subsequently prices became steadier, with sellers on Wednesday of June at 1s. 2½d. and August, 1s. 2½d.. Practically no business has been done, however, owing to the holidays and the desire to wait the result of the Amsterdam bark sale to-day, where an advance in the unit is anticipated. The London stock of quinine was reduced by 40,000 oz. during March.

SAFFRON is firm, but inactive, at from 23s. to 25s. per lb., according to quality.

SANTONIN.—There is some inquiry, but practically nothing is obtainable under makers' price, which is 16s. 9d. per lb.

SHELLAC.—Previous to the holidays there was a recovery of 1s. 6d. in the delivery market, and a moderate business was done, the closing quotations being, May, 114s. 6d.; June, 115s. 6d.; July, 116s. 6d.; and August, 117s. 6d. per cwt., with spot sales of TN at 112s. to 115s. for fair to fine. The above prices have not been maintained this week, however, and values are easier, June selling at 114s., and August, 115s. 6d. per cwt.

SOY is quiet at 1s. 6d. per gal., duty paid.

SPERMACETI.—For American in 20-box lots 11½d. per lb., c.i.f., is quoted.

SPICES—*Black Pepper* is dearer owing to a good continental and American demand for shipment from Singapore, and small shipments to London. Singapore is now quoted 5½d. per lb. on the spot, and business has been done at 5½d. to 6d. per lb. for shipment according to position. *White Pepper* continues quiet at late quotations; Singapore 9½d., Siam 9½d., and Penang 9½d. per lb. on the spot. Very little business has taken place in *Zanzibar Cloves*, and prices are practically unchanged at 3½d. per lb. for spot, and 3½d. for June-August delivery.

SUGAR OF MILK.—Finest American powder is quoted 40s. per cwt. in barrels, with a reduction for ton quantities.

THYMOL is offered at from 7s. 3d. to 7s. 6d. per lb.

TONKA BEANS.—Good crystallised Pará are still scarce, 2s. 6d. per lb. being wanted.

WAX, CARNAUBA.—Recent sales in Liverpool include 74 bags good fair to fine yellow at 71s. 6d. to 77s. 6d. per cwt., and 24 bags Ceara and Maranhão grey at 51s. 6d. to 54s.

JAMES'S POWDER.

In the book entitled "Some Unpublished Letters of Horace Walpole," edited by Sir Spencer Walpole, recently issued by Messrs. Longmans, Green & Co., there is frequent mention of James's powder, which was the fashionable remedy of the day. Horace Walpole urged its use for his friend Madame du Deffand with such persistency that one might almost suppose he had some interest in pushing its sale. On hearing of the lady's illness he writes:

"Would it be impossible to give "James's powder?" if it were but 5 gr. or 6 gr. . . . I would give the universe to have her try it. I earnestly beg you to recommend it."

Again he writes:

"Yet I should hope, if she had taken "James's powder," though I did not express it so much as I wished to do, because I am at a distance and cannot be a perfect judge."

"How I abhor all professions!" he declares, on learning that the doctor has refused to prescribe the powder; and then, as if in despair, he exclaims, "Oh, if it were not too late to give her "James's powder"!" J. A. Paris, in his "Pharmacologia," says that the celebrated fever-powder of Dr. James was evidently not his original composition, but an Italian nostrum invented by a person of the name of Lisle, a recipe for the preparation of which is to be found at length in "Colborne's Complete English Dispensatory for

the year 1753." In the last edition of the "Pharmacologia" (1843) there is the following foot-note:

Some years since I received a very interesting letter from Dr. Halliday, of Moscow, in which he thus comments upon the above passage: "You attribute the invention of James's powder to one Lisle, which was not the fact; as the original author was the father of a very old friend of mine, Mr. McIntosh, perhaps you may think it worth while to correct the mistake in a future edition. The above inventor was a German apothecary and chemist of the name of Schwanberg, with whom Dr. James was associated, and who, on obtaining the patent, vended a medicine which did not accord with the specification. Mr. McIntosh, who was in the habit of preparing medicine for the supply of Moscow, assured me that the formula given in the London Pharmacopœia for the pulvis antimonialis was something like the original recipe, but differed from it in certain particulars, which he was bound by an oath not to disclose."

—British Medical Journal.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of March, 1902, and to the stocks on March 31.

	March		Stocks		1902	
	Landed	Delivd.	1902	1901	Imprtd.	Delivd.
Aloes	103	115	1,288	1,337	209	338
"..... gourds	—	—	—	765	—	146
Aniseed, star	—	—	12	54	35	33
"Balsams"	1	13	500	265	153	270
Calumba	1	156	1,574	1,037	127	46
Camphor	742	1,060	979	3,143	2,467	2,231
Gardamomus	485	438	2,453	2,151	1,776	1,256
Oinchona	1,791	2,29	9,882	10,080	4,801	5,217
Cochineal	22	83	1,055	1,934	157	198
Cubeb	—	5	1,20	1,394	47	121
Dragon's-blood	9	12	70	88	31	19
Galls	167	512	8,42	40,100	1,232	1,016
Gums—						
Ammoniacum	—	9	69	93	—	13
Animi & copal	4,256	4,037	23,941	11,125	14,322	12,849
Arabic	2,972	2,021	15,616	14,884	6,020	6,372
Asafetida	—	278	10,075	354	949	711
Benzoin	183	30	1,13	23	1,54	769
Dammar	273	525	2,822	4,019	883	1,333
Galbanum	—	—	—	10	—	—
Gamboge	—	23	54	159	16	58
Guaiacum	—	2	45	37	14	13
Kauri	155	214	1,539	1,901	765	(9)
Kino	18	3	167	78	70	21
Mastic	—	—	10	3	17	3
Myrrh, E.I.	4	19	134	197	228	10
Olibanum	1,756	314	2,792	2,712	2,593	751
Sandarac	942	61	1,311	842	775	182
Tragacanth	1,703	797	5,046	4,768	4,203	3,446
Ipecacuanha, Rio bls	22	65	478	223	62	152
"other kinds pkgs"	21	4	451	124	182	187
Jalap	—	10	130	101	—	19
Nux vomica	—	13	51	989	97	57
Oils—						
*Anise	—	45	865	163	300	114
*Cassia	—	14	308	108	40	66
Castor	315	156	4,08	511	1,021	845
Cocoa-nut	68	87	85	78	200	26
Olive	384	181	1,355	955	838	518
Palm	tons	6	7	12	—	11
Quinine	lbs	188	2,811	215,145	196,843	2,536
Rhubarb	cts	12	104	422	1,035	188
Sarsaparilla	bls.	81	1,05	200	160	301
Senna	bls. &c.	241	555	2,160	1,792	1,340
Shellac	cts	2,941	3,402	29,605	40,445	11,532
Turmeric	tons	32	35	404	304	80
Wax, bees'	pkgs	307	515	1,305	1,076	890
"Japan cs. &c."	74	63	245	546	167	207

* Stocks lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

By new regulations under the New Zealand "Opium Prohibition Act, 1901," crude opium, opium in powder, and solid extract of opium, are deemed to be forms of opium which, though not suitable for smoking, may yet be made suitable, and the importation is declared to be unlawful, except under a permit issued by the Commissioner of Customs.

Chemical Society.

ANNIVERSARY MEETING.

THE members met at Burlington House on Wednesday, March 26, when the chair was taken by the President, Professor Emerson Reynolds. The attendance was rather meagre, although a few well-known provincial Fellows, attracted to town no doubt by the Raoult Lecture, which was given the same evening, were present. The first business was the ballot for the election of officers, Mr. Hugh Ramage and Dr. T. A. Henry being appointed scrutators. The names of the gentlemen selected to fill the vacant positions have already been given in the *C. & D.*, and it is sufficient to add that they were all elected, this annual reconstitution of the governing body being a mere formality, wherein the Fellows quietly agree to the Council's proposals. The President then read his report on

THE YEAR'S WORK.

He congratulated the Society on a continually increasing number of Fellows, the membership of the Society being at present 2,335, against 2,226 last year. The number of papers printed in the *Transactions* shows a slight increase on last year's figure, and there has been no falling-off in the quality of the contributions. One of the most valuable branches of the Society's work is the circulation of books from its now extensive library, and in this way eighty parcels of books were sent out to country Fellows during the year. The Research Fund, from which grants of money are made to Fellows in a position to carry on research-work, was drawn upon to the extent of 250*l.* The Society lost during the year two prominent Fellows—Sir Henry Gilbert, F.R.S., and Dr. Maxwell Simpson.

After disposing of his report, the President, following a long-established custom, proceeded to make a few remarks on a current chemical topic, and selected for this purpose the subject of

THE GENESIS OF THE ELEMENTS

Theories of the transmutation of the elements and their formation from some more elementary *protoyle* have always exercised a peculiar fascination for English chemists—a fascination which is apparently amusing and inexplicable to certain continental *savants*, who regard this subject as disposed of by the atomic-weight determinations of Stas and others, since these can no longer be taken as integral multiples of any small number. The President's contribution to the subject takes us perhaps no nearer to the heart of the matter, but generalises it in an interesting way. He finds that by arranging the elements according to their atomic weights on a curve, which may be taken as representing the motion of a stretched string vibrating in segments, the ordinary elements fall on the moving parts of the curve whilst the elements like argon, neon, and krypton occupy the points where no motion occurs—*i.e.*, the nodes, of the string. The elements like iron, cobalt, and nickel, which do not fit easily into any periodic-table representation of the elements, in this scheme occupy a harmonic curve—*i.e.*, a curve representing the same string moving in larger segments. This arrangement of the elements, the President pathetically observed, when first brought forward by him in 1886, was somewhat irreverently described as "Reynolds's staylace."

Dr. Gladstone in proposing that the President should allow his address to appear in the *Transactions*, whilst fully appreciating the ingenuity of the "staylace," regretted that it seemed impossible to get a nearer insight into what was the real cause of these relations of the elements. Dr. Tilden then presented

THE TREASURER'S REPORT,

which showed that the Society had the handsome balance of 2,000*l.* on the year's work. He, however, as is the manner

of efficient Treasurers, advocated economy, since the forthcoming decennial Index will absorb a good deal of money, and in a few years the continual growth of the Society will necessitate some structural alterations in the House. After the proposal and acknowledgment of a vote of thanks to the auditors of the Society's accounts, Dr. Dixon proposed, in an amusing speech, a vote of thanks to the Secretaries, Foreign Secretary, and Council. The Foreign Secretary (Professor Meldola, who has retired and been succeeded by Professor Ramsay) he described as a radio-active body whose function appears to be to shed rays of light on the occasion of the jubilees of eminent foreign chemists; and as to whether his successor will prove a body of even higher atomic weight, and consequently greater radio-activity, the future will show. Professor Meldola having suitably replied, the meeting adjourned.

DINNER TO PROFESSOR VAN 'T HOFF.

In the evening a dinner was given at Limmer's Hotel by the officers and Council to Professor van 't Hoff, of Berlin, who had come over to England to deliver the Raoult Memorial Lecture. The President of the Society was in the chair, and among those who supported him were Lord Kelvin, Sir William Huggins, Principal Rücker, Professor Odling, Professor Dewar, Professor Witt, Dr. Thorpe, Dr. Gladstone, and Dr. Perkin.

After the toast of "The King" had been proposed by the President, that of "Professor van 't Hoff" was given by

Lord Kelvin, who referred to him as the founder of modern physical chemistry. Lord Kelvin said that as a physicist, if so he might call himself, he had for fifty years taught his students that chemistry and physics are one—nay, more, that chemistry is a branch of natural philosophy. There were two reasons why he had not himself taught chemistry; one was that there was no time, and the other that he did not know enough. Sixty

years ago chemical atoms were thought of as objects infinitely small; now they were told that they are things of real magnitude, and a hydrogen atom, so far from being indivisible, has at least 500 parts, and, in fact, is a cluster having as many parts as a galaxy of stars. He referred to Professor van 't Hoff's brilliant application of the principle of thermo-dynamics to explain the observed phenomena of solution, as developed by Raoult and Van 't Hoff himself, and to the latter's extension of investigations to the case of solvents other than water.

In reply, Professor van 't Hoff agreed with Lord Kelvin on the whole that chemistry is a branch of physics, but with the restriction that it forms the largest branch of all. He was glad to be among the members of the London Chemical Society, not only because it is the oldest chemical society in the world, but also because it was the first to honour him with honorary membership, for which he had never before had the opportunity of thanking it personally. He concluded by proposing the toast of "The Society" to which the President replied.

RAOULT MEMORIAL LECTURE.

François M. Raoult was elected in 1898 one of the forty honorary members of the Chemical Society. Ten years before a similar honour was done to the comparatively young Dutch chemist, Dr. J. H. van 't Hoff, who was following in Raoult's footsteps. On April 1 of last year the labours of the French chemist—carried on in comparative obscurity—were terminated by his death, and the Chemical Society, ever ready to do honour to foreign workers, arranged for a



PROF. REYNOLDS.



PROFESSOR VAN 'T HOFF.

memorial lecture by Van 't Hoff. In anticipation of a large attendance the Royal Institution Lecture-theatre was obtained, and there on Wednesday evening of last week was an audience of between 300 and 400 to receive Professor van 't Hoff, who at 9 o'clock stepped into the theatre accom-



FRANÇOIS M. RAOULT.

panied by Professor Emerson Reynolds, Lord Kelvin, and Sir Wm. Huggins, with the leading members of the Society, its officers, and past Presidents. Professor van 't Hoff wore several decorations, and stood at the historic lecture-table while the President introduced him to the meeting. Professor Emerson Reynolds referred to the lecturer as the professor-general of chemistry at the University of Berlin, and recalled the time when he taught chemists to look upon the beautiful atom carbon in space, whereby arose new possibilities in the chemistry of carbon compounds. Like the carbon atom, Professor van 't Hoff, he continued, possessed four links of national interest—the first, with his own country, Holland; the second, with Germany; the third, with this country; and the last of the four valencies brought us into combination with France. (Applause.)

Professor van 't Hoff, after the applause had subsided, began to lecture in perfect English syntax, with here and there a modification of the vowels which indicated that the language is not his native tongue. Raoult, he said, was a man of retiring habits who had hardly ever left France, and living in the out-of-the-way town Grenoble had come little into contact with fellow-workers in the same domain of science. Yet he was one of the most prominent men of science. He was born at Tours on May 10, 1830, and was of modest origin; indeed, poverty haunted him all his student-days up to the time (1853) when with a thesis embodying observations on the transport of electrolytes by magnetic currents he graduated in Paris. In 1856 he was appointed an assistant professor at Rheims, where he remained until 1862, when he obtained a similar position elsewhere, and in the following year with a thesis on "Electromotive Force" obtained his doctorate in physics. This really commenced his scientific career. Raoult's life-work, the lecturer said, can be divided into three parts—physical, chemical, and (the most important) physico-chemical. In the first branch he mentioned Raoult's investigations into the energy relations of electric cells, when he clearly anticipated the results deduced later by Helmholtz, Willard-Gibbs, and others from thermodynamical considerations that the available energy of a cell is not wholly secured in the electric current produced by it. These researches by Raoult were at the time entirely overlooked, because they were, on the theories of that day, quite unexplicable. It was not until 1878, fifteen years after the observations were published, that their worth was recognised. The purely chemical contributions to scientific knowledge made by Raoult were neither extensive nor remarkable, being limited to the recognition of the gas (marsh-gas) given off by a mineral spring near Grenoble, and to the interesting physiological discovery that copper and zinc exist in the human liver, especially

of old men—a remark which made the audience laugh heartily. Raoult had removed to Grenoble in 1867, and was appointed successor to Gervais in the chemistry chair there. Besides the subjects mentioned he did some work on the absorption of ammonia by ammonium nitrate (in which, however, Divers was before him), the utility of retort-carbon in boiling sulphuric acid (to prevent bumping), the inverting action of light on sugar, and he showed that inhalation of carbon dioxide diminishes exhalation of that gas. In all this Raoult was feeling his way, for it was as a physico-chemist that he achieved fame. His cryoscopic researches originated in an attempt to determine the alcoholic strengths of various beverages, his first contribution on this subject being the determination of the freezing-points of such materials as cider and marsala. The results so obtained led him to determine the freezing-points of solutions of different strengths of such substances as glycerin, maunitol, and various alcohols when he observed that the lowering of the freezing-point of water occasioned by those substances is proportional to their molecular weights. From this result it was a short step to the suggestion that the observation of the freezing-point of a solution affords data for the determination of the molecular weight of the dissolved substance. His paper dealing with twenty-nine substances was published on June 5, 1882.

A great part of Raoult's later work was devoted to cryoscopic measurements of organic and inorganic substances in solution, and to the determination of the constants of liquids suitable for this purpose. He was at first sceptical with regard to the anomalous results observed by other workers when investigating the behaviour of salts in aqueous solution, but finally convinced himself by his own measurements of the validity of these observations and accepted the doctrine of electrolytic dissociation as accounting for them.

His second great contribution to science was the discovery that the boiling-point of a liquid is increased by the solution of a substance in it to an amount proportional to the molecular weight of the solute—a result completely parallel with his observations on the freezing-points of solutions. This behaviour also he took advantage of for the determination of molecular weights, and himself discovered that certain solvents—such as acetic and formic acids—give higher molecular weights for well-known substances than those bodies can possibly have. The explanation of this anomaly was also given by him as due to "association" of the simple molecules into double and triple molecular groups, as had already been observed by others in determining the vapour-density of acetic acid.

The lecturer referred in appreciative terms to the painstaking, accurate, and unobtrusive character of Raoult's work, and pointed out that chemists as a body owe much to him for the introduction of two such weapons for the determination of molecular weights. His work had also served as a centre and stimulus for the researches of the now numerous band of physical chemists whose labours have so vastly benefited chemistry and physics during the last twenty years. It was, for example, his work from which Arrhenius and the lecturer, as well as Ostwald, started in formulating the modern theory of solution.

In the last part of the lecture Professor van 't Hoff referred to Raoult as a man, speaking of the various honours which had been conferred upon him, and of his retiring disposition yet happy home life. The lecture was a simple and earnest tribute to a great man.

SPEECHES OF THANKS.

Professor Odling, who was called upon to move a vote of thanks, said it was an appreciative and unaffected and simple account of the work of Raoult—an account so lucid and complete that no matter from whom it came it would have been of peculiar interest, but coming from a man so distinguished as Professor van 't Hoff it had given all the greater pleasure. Then he referred to Professor van 't Hoff's own work, saying it did not, very properly, win its way without some contest, and in some continental schools it was treated with some undue harshness of reception for which a friend of his own—the late Professor Kolbe—was responsible. Kolbe, he continued, "was a man of great chemical insight who laboured under the disadvantage of being unable to assimilate ideas evolved from a different stand-

point from his own. (Laughter.) I have a certain degree of sympathy with him, for, however revolutionary one may be in one's youth, one does not take kindly to revolution in old age (Renewed laughter.) But, however this may be, Professor van 't Hoff can regard with complacency the reception with which his far-reaching conception was originally received. As with his theory of the chemical atom in space so is it with the doctrine of osmotic pressure and his philosophy of solution. In no country have the doctrine of osmotic pressure and the theory of solution, with the supplemental observations of Arrhenius, met with greater favour than in this country; not as a final truth, if a truth at all, but as running on all-fours with it."

Professor Dewar, in seconding the vote, said it was a gratification to the Society that their distinguished honorary Fellow, the world-wide Professor van 't Hoff, had shown how the field of chemistry, which is wide beyond any other, had been opened up by the patient scientific work of Raoul. Sometimes we hear that England is not kind in recognising foreign talent, but that could not be said of the Chemical Society, which is ever ready to do honour to foreign chemists.

Sir William Huggins, P.R.S., supported the vote in a brief speech, referring to the scientific stimulus which Professor van 't Hoff's presence amongst them gave to English scientific men. He regarded Professor van 't Hoff as a philosopher as well as a chemist, and although he had specially devoted himself to the loves and hates of atoms and molecules, his work had bearing upon the whole universe of science.

The President then put the motion to the meeting, and it was carried with acclamation.

Professor van 't Hoff, on rising to reply, was received with renewed acclamation. He said: "I have more reason to thank you: to listen is more difficult than to speak. I feel that this occasion has given me something. This lecture has brought me to the works of a man whose works I know, and whom I esteem over all others on account of what he has done in regard to the theory of solution and osmotic pressure." At this point Professor van 't Hoff walked across the room and bowed to Professor Oeding, who rose and bowed to him in response, the company meanwhile cheering; and the cheers turned into laughter when Professor van 't Hoff added, "I hope I will see them in print."

The meeting then closed.

Our Town Traveller.

I had a talk the other day with one of the partners of

MESSRS. JOHN PHILLIPS & SONS,

the well-known sponge-merchants of York Road, City Road, E.C., regarding the withdrawal of all their country travellers. Mr. Phillips was perfectly frank about the matter, and told me that, after a trial of seven or eight years, his brothers and he had come to the conclusion that it would be better policy, both for the firm and also for their customers, to abolish the country-traveller system altogether, and to deal with their country friends direct.

"Travellers in the sponge-trade," said Mr. Phillips, "have to carry a large and varied stock of samples, and even the largest of these stocks is not varied enough to suit every customer. The expenses are heavy, averaging, I should think, from 13/- to 15/- per week. We have thought it better to give our customers the benefit of this saving in weekly expenditure, and we think they will be in no way inconvenienced by the withdrawal."

"But how do you propose to let your customers select their goods?" I inquired. "You cannot expect them all to come up to London when they want sponges."

"Oh, certainly not," replied Mr. Phillips; "we have made very complete arrangements to meet all these difficulties. We are prepared to send original cases carriage-paid to any of our customers on approval. Our business is strictly wholesale, and we reckon that course will be more satisfactory to our clients, and less expensive to ourselves, than the system we have discarded."

"And about how much do you think your latest method will save the buyer?"

"Well, a customer from Sheffield called here this morning. Amongst other purchases, he bought a case containing

ninety sponges at 2s. 6d. each. The traveller selling those same sponges would have had to charge 2s. 9d. each for them to cover his expenses."

"That is, therefore, a net saving of 1l. 2s. 6d. on the case to the customer?" said I, proud of my arithmetic.

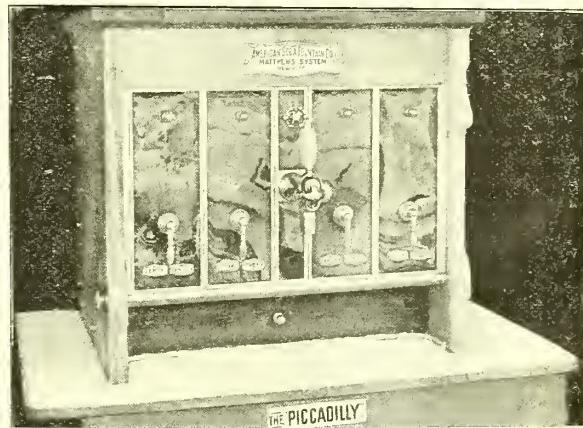
"Quite so," assented my genial victim, "and not only that—the buyer is better satisfied because he has the stock in the whole of this building to choose from."

"The whole of this building," as I have beforetimes explained, is a term of considerable magnitude. It embraces many cubic feet of space, and includes thousands of cases and millions of sponges. If it has any fault, it is an *embarras de richesse* for the fortuitous sponge-sampler, and it certainly ought to compensate the provincial buyer for a withdrawal which is promulgated for his benefit. That the action of the firm is already appreciated by the retailer is evidenced by correspondence which Mr. Phillips showed me from several well-known country chemists.

With the approach of summer the fancy of some chemists turns to thoughts of thirst-quenchers, and many there be nowadays who dream of soda-fountains and their concomitant profits. Last year there was a boom in fountains, and in order to ascertain if this is to be sustained, I recently interviewed Mr. N. W. Stiles, of

MESSRS. STILES (LIMITED),

at the new office, 74 Gray's Inn Road, Holborn. Mr. Stiles, with the knowledge that he has sold forty machines since January 1, was sanguine that the boom will be maintained; as a matter of fact, he looks upon the soda-fountain in Great Britain as now a permanent institution. This year Messrs. Stiles (Limited) have produced several new styles of fountains exclusively for the English market; the "Piccadilly," illustrated herewith, is one of them. It is an all-onyx



affair with metal fittings, and is supplied without superstructure. The length at base is 2 feet 7 inches, the width 2 feet 1 inch, and the height 2 feet 5 inches. It has eight oscillating glass syrup-jars and one double-stream soda-water draught arm, and the price is 98*s*. The "Strand" is a more elaborate and expensive fountain, also built specially for the English trade; and there are many other fine fountains in the showrooms to select from and to suit all tastes and conditions of banking account. That Messrs. Stiles have confidence in the future of the business is evidenced by the fact that this year they have laid down plant for the preparation of all the syrups requisite for the fountain. No essences are used, the flavours being obtained directly from the fresh fruits; and a special "fruit-drink" expert of twenty years' experience has been imported from the United States to superintend the manufacture. Concentrated syrups (1 to 5) will be supplied, and all the adjuncts for the soda-concoiter, such as crystal dishes (with elaborate nickel lids) for holding crushed strawberries and so forth, ice-cream spoons, glass jars for holding straws, &c. For the convenience of those who wish to dispense ice-cream soda and other cream drinks Messrs. Stiles have likewise introduced the "Monitor" brand Swiss milk in airtight tins, which they guarantee a pure milk.

Personalities.

MR. FRANK ROSS, of Messrs. Thomson & Taylor, Bombay, is now in London.

MR. JOSEPH FLETCHER, chemist, Scunthorpe, has been appointed on the Commission of the Peace for the Parts of Lirsey.

MR. EDWARD MACHON, chemist, Derby, has been unanimously elected for the fifth time people's warden of Christ Church, Derby.

MR. C. J. TAYLOR, pharmaceutical chemist, Shorncliffe Road, Cheriton, near Folkestone, has been appointed an overseer of the parish.

MR. THOMAS J. KEENAN, Associate Editor of the *American Druggist*, arrived in London on Tuesday on a short and mainly personal visit to Europe.

MR. H. MONKHOUSE, chemist and druggist, Irongate, Derby, has been re-elected a member of the Executive Committee of the Derby Chamber of Trade.

MR. GEORGE NELMES, chemist and druggist, 39 Fox Street, Liverpool, has been elected people's warden of St. Timothy's Church, Rokeby Street, Liverpool.

MR. A. H. WADDINGTON, chemist and druggist, Bradford, has been elected to act as Hon. Secretary of the Trades Procession Committee established by the Bradford Corporation to organise that particular feature of the local Coronation celebrations. Mr. Waddington served in a like capacity on the occasion of the Diamond Jubilee celebration.

A GOOD portrait of Mr. Edward Evans, jun., appears in this week's *Tatler*, which says "One of the most important men in Liverpool to-day is Mr. Edward Evans, jun. He is a partner in the well-known firm of Evans, Sons & Co., a Justice of the Peace for Cheshire, and an enthusiastic worker for the Liberal party in Liverpool. Mr. Evans is popular with all classes, as a recent presentation of silver plate to himself and to his wife sufficiently indicated."

MR. E. WIGHTMAN BELL, F.C.S., chemist and druggist, Spalding, is the centre of interest in a deadlock between the local and central authorities over the appointment of an analyst, under the Fertilisers and Feeding-stuffs Act, for the Holland Division of Lincolnshire. Mr. Bell was appointed district analyst under the Act several years ago, but the Board of Agriculture declined to confirm the appointment, and asked for a fresh nomination. The Council replied by sending up Mr. Bell's name again. The nomination was officially

ignored, with the result that the Act is a dead letter in the division. The Department is now, however, stirring up local authorities to make more use of the advantages of the Act, and the question came before the General Purposes Committee at Spalding on Tuesday, when the opinion was expressed that it was detrimental to the district not to have an agricultural analyst, but unabated confidence was expressed in Mr. Bell as in every way a capable man. It was agreed to recommend the County Council to write to the Board of Agriculture asking for the confirmation of the appointment of Mr. Bell. We hope the Council persists in the matter, and as such appointments are eminently suitable for pharmacists the Pharmaceutical Council might do worse than give the Board of Agriculture advice.

MR. T. J. BARRATT, of Messrs. A. & F. Pears (Limited), is the owner of Bellmoor, Hampstead Heath, which stands near the Flagstaff marking the highest point in the county of London; he has had affixed a tablet to one side of his house, bearing the following inscription: "Bellmoor, Hampstead Heath. The surface of the soil is here

455 feet 7 inches above the sea-level, or 16 feet 7 inches higher than the top of St. Paul's Cross." On another tablet is an outline diagram of St. Paul's, drawn to scale to show the difference in levels.

MR. H. BRERETON BAKER, M.A., member of the Council of the Chemical Society, late scholar of Balliol College, Oxford, has been elected by the governors of Dulwich College to be headmaster of Alleyn's School, Dulwich. Mr. Baker, who has had several years' experience as senior science master in Dulwich College, is known for the papers he has contributed to chemical literature on the remarkable influence of traces of moisture in facilitating chemical action. Alleyn's school possesses excellent physical and chemical laboratories.

THE death of Mr. Edward Baker, of Chichester, which we announced in last week's issue, removes not only a veteran in the peaceful art of pharmacy, but a participant in the struggles of the Crimean War and the Indian Mutiny. Mr. Baker was a native of Chatham, and when quite a lad enlisted in the 16th Lancers, but was bought out. However, he had a predilection for a military career, and in 1841 he enlisted in the 34th Foot (now the "Border Regiment"), which had its dépôt then at Dover. He was, therefore, a pretty well-seasoned soldier when the Crimean War broke out, and in the operations against Sebastopol he was hospital-surgeon of his regiment. Mr. Baker, who could tell many tales of Crimean deeds, recently wrote to a newspaper of the strange coincidence that the 34th Foot, having at the battle of Arozo des Molinos, in the Peninsula, captured from the 34th Regiment of French Infantry the whole of their band instruments, &c., found themselves in the Crimea quartered next to the very same corps. The English 34th had the drums of the French 34th still in their possession, and the English colonel, to avoid trouble, had them whitewashed and sent down to Balaklava! After the fall of Sebastopol, Hospital-Sergeant Baker took a fatigue-party into the town to obtain hospital-necessaries, and while there met a French Zouave with a Russian Eagle which he had looted from Government House. The Zouave parted with his trophy for a consideration, and the Eagle was afterwards presented by Sergeant Baker to the Mess of his regiment, and is still highly prized, like the French drums. In 1857 his regiment took an active part in the Indian Mutiny, Sergeant Baker being with a party of the first British troops to enter Cawnpore after the massacre; and he was also present at the relief of Lucknow. He possessed the Crimean and Turkish medals, as memorials of the great struggle against Russia; the Indian Mutiny medal; and also medals for long service and distinguished conduct in the field—the last-mentioned having been granted during the Crimean campaign for bringing in wounded under fire after the attack on the Redan. On the return of the regiment from the Crimea in 1856, and while it was stationed at Edinburgh Castle, a handsome service of plate was presented to Hospital-Sergeant Baker by some of the officers, "in grateful remembrance of the kind and unremitting attention that he evinced towards them when wounded during the siege of Sebastopol." And in 1861, when he quitted the Service, Lieut.-Colonel Sir Richard Kelly, K.C.B., and the officers gave him a purse of sixty-four sovereigns, as a mark of their regard and esteem. After leaving the army, Mr. Baker established himself as a chemist and druggist in Eastgate Square, Chichester, where his son Mr. Samuel Baker subsequently became associated with him, and has had the management of the business for some years past. Mr. Baker took an active part in public affairs, being a member of the Town Council and of the Board of Guardians. The funeral took place on March 26, at the city cemetery.



MR. EDWARD BAKER.



MR. E. WIGHTMAN BELL.